Missouri Department of Natural Resources
Air Pollution Control Program

PART 70
PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2013-008A
Expiration Date: February 07, 2018
Installation ID: 097-0013
Project Number: 2013-03-081

Installation Name and Address
TAMKO Building Products, Inc.
601 North High Street
Joplin, MO 64801
Jasper County

Parent Company's Name and Address
TAMKO Building Products, Inc.
P.O. Box 1404
Joplin MO, 64802-1404

Installation Description:
TAMKO Building Products, Inc. operates a roofing products manufacturing plant in Joplin, Missouri. The facility's manufacturing processes include mineral handling and storage, limestone grinding, granules and headlap handling and storage, heated asphalt storage tanks, asphalt saturators, asphalt coaters, sand/talc and granule applicators, natural gas and propane fired combustion units, metal working, and fiber core fabrication. This facility exceeds the Part 70 Installation thresholds for particulate matter – ten micron and volatile organic compounds. This Modification includes the addition of two natural gas fired air make-up units (EP2012-01 and EP2012-02) and multiple portable kerosene heaters.

David Buttig

Prepared by
David Buttig
Operating Permit Unit

Director or Designee
Department of Natural Resources

MAR 29 2016

Effective Date

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INSTALLATION DESCRIPTION

TAMKO Building Products, Inc. is the nation's leading independent manufacturer of residential and commercial roofing products, waterproofing, composite decking and railing systems, and cements and coatings. With more than 75 years in the industry, TAMKO's success is the direct result of teamwork, enduring relationships with customers, suppliers and employees, and its commitment to Six Sigma continuous quality improvement with its foundation based on the total quality management principles of Dr. W. Edwards Deming.

TAMKO has manufacturing plants in Phillipsburg, Kansas (1969); Tuscaloosa, Alabama (1974); Knoxville, Tennessee (1978); Frederick, Maryland (1978); and Dallas; Texas (1985) and the expansion of the TAMKO organic shingle and built up roofing product lines to include fiberglass shingles and rolls and the AWAPLAN single ply polyester roll roofing products.

In 1994, TAMKO Asphalt Products, Inc. changed its name to TAMKO Roofing Products, Inc. to reflect the company's focus on roofing products. Since 1994, TAMKO's expansion has continued at a dramatic pace. The addition of new manufacturing plants expanded TAMKO's production capabilities for additional organic roll products as well as asphalt cements and coatings at Green Cove Springs, Florida (1994); additional glass mat production at Ennis, Texas (1996); additional fiberglass built up roll roofing at Naples, Texas (1997); polyester mat, cements and coatings, and waterproofing at Columbus, Kansas (1998); additional dry felt at Butler, Alabama (1998); the MetalWorks metal shingle production facility at Joplin High Street (2003) and many additions and modifications at existing plants to increase capacity for the production of Heritage laminated shingles, the cornerstone in TAMKO's residential roofing product line.

Beginning in 1999, TAMKO also entered into the plastic composite decking business with its purchase of composite manufacturing equipment in Lamar, Missouri. Since 1999, TAMKO through its Epoch Composites subsidiary, has rapidly expanded its production of EverGrain and Elements decking lines with the addition of multiple production lines in its original Lamar plant site (Lamar South), the construction of a new decking production facility with multiple production lines at a new site also in Lamar (Lamar North – 2004), and the acquisition of a new facility in Chilhowie, Virginia (2004). In

addition, in 2002 TAMKO added a composite plastic shingle manufacturing plant at Lamar South to produce Lamarite, the premier synthetic slate and wood shake shingle product line. Most recently, TAMKO has added extruded railings to complement its decking product line. In addition, TAMKO has embarked on further vertical integration of key raw materials with production of glass fiber at its joint venture facility ("MW/MB") in Clarksville, Tennessee.

TAMKO has continued to build on the success of the Deming quality principles with the launch of a comprehensive Six Sigma program across the company beginning in 2002. Six Sigma at TAMKO is a business strategy and management philosophy for the urgent pursuit of perfection to achieve increased profitability with a goal of near perfection. Six Sigma projects have saved millions of dollars, refined and improved numerous processes, and have enabled TAMKO to become a world class company.

On June 1, 2006, TAMKO Roofing Products, Inc. changed its name to TAMKO Building Products, Inc. to more accurately reflect the breadth of products and services TAMKO provides. TAMKO not only manufactures roofing but also EverGrain and Elements composite decking, TAM-Rail railing systems, waterproofing materials, window and door wraps, asphalt cements and coatings, insulation facer, and many of its own raw materials such as glass mat, dry felt, processed asphalt, paper cores, polyester mats, and crushed limestone.

Today, TAMKO remains headquartered where it began in Joplin, Missouri, with operating manufacturing and warehouse facilities across the country in order to serve its customers across the nation. While the processes, facilities, and products have been adapted to meet the competitive challenges and to serve our customers over the years, TAMKO has never wavered from E.L. Craig's original vision to serve our customers' needs with quality, dependable products. Commitment to this vision and to the continuous improvement of all TAMKO's products and services promises that TAMKO's future will be as exciting and successful as its past.

This permit modification is issued in response to Construction Permit #122012-012, issued on December 21, 2012. The construction permit authorized the installation of two (2) natural gas fired air make-up units (EP2012-01 and EP2012-02) both rated at 12.5 MMBtu/hr and multiple portable kerosene fired heaters to be used for building heat. Previously, TAMKO was permitted to operate the portable kerosene heaters at a total capacity of 11.5 gallons per hour. TAMKO has increased its capacity to 33.25 gallons per hour with additional heaters. The fuel used to fire the portable kerosene heaters is limited to K-1 grade kerosene.

Reported Air Pollutant Emissions[1], tons per year					
Pollutants	2012	2011	2010	2009	2008
Particulate Matter ≤ Ten Microns (PM_{10})	4.0	4.1	5.3	6.5	7.6
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)	1.8	2.0	5.3	6.4	7.6
Sulfur Oxides (SO_x)	1.1	1.3	1.0	1.3	1.6
Nitrogen Oxides (NO_x)	4.8	4.8	4.1	5.2	4.3
Volatile Organic Compounds(VOC)	40.6	45.1	36.1	48.3	59.2
Carbon Monoxide (CO)	7.2	7.5	6.3	8.1	8.1
Lead (Pb)	0.0	0.0	0.0	0.0	0.0
Hazardous Air Pollutants (HAPs)[2]	1.68	1.68	2.26	2.78	2.78
Ammonia (NH_3)	0.0	0.0	0.0	0.0	0.0

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Point	Description of Emission Point
EP32B	AWA Asphalt Tank #10: capacity 22,700 gallons; construction date 1992
EP32C	AWA Asphalt Tank #11: capacity 22,700 gallons; construction date 1992
EP28B	AWA Asphalt Tank #13: capacity 36,800 gallons; construction date 1996
EP49	AWA Saturator: applies asphalt to mat; maximum hourly design rate 2.90 tons asphalt per hour; construction date 1978
EP49A	AWA Coater: for applying asphalt to mat; maximum hourly design rate 7.40 tons asphalt per hour; construction date 1978
	AWA (Overhead) Mixing System Vertical Holding Tank
	AWA Polymer Mixer
EP200	AWA Mixing System Vertical Holding Tank: holds modified asphalt, part of AWA mixing system, capacity 10,000 gallons; construction date 2004
EP62C	CRL Asphalt Tank #12: capacity 36,800 gallons; construction date 1993

[1] This information is taken from the MoEIS (Missouri Environmental Information System) from Missouri installations that satisfied the reporting requirements of 10 CSR 10-6.110.

[2] HAPs may be summarily reported, through the Emission Inventory Questionnaire or MoEIS on-line, as VOCs or PMs.

Emission Point	Description of Emission Point
EP62D	CRL Asphalt Tank #14: capacity 36,800 gallons; construction date 1993
EP28C	CRL Asphalt Tank #15: capacity 36,800 gallons; construction date 1996
EP50	CRL Saturator: dip tank for applying asphalt to mat; maximum hourly design rate 8.15 tons per hour; construction date 1973
EP50A	CRL Coater: applies asphalt to mat; maximum hourly design rate 2.95 tons per hour; construction date 1973
	CRL Horizontal Mixer
	CRL Vertical Mixer
	CRL Wet Looper
EP 39	AWA FR Storage Tank; fire retardant (FR) raw material storage; maximum hourly design rate 2.60 tons per hour; construction date 1989, Peabody Tech Tank
EP40	AWA FR Transfer Tank: holding tank for fire retardant (FR) during heating; maximum hourly design rate 2.60 tons per hour; construction date 1989, Peabody Tech Tank
EP41	AWA Limestone/FR Surge & Weight Tank: holds and weighs raw material; maximum hourly design rate 3.91 tons per hour; construction date 1989, General Steel
EP2004-1	AWA Precoater: also referred to as Top Coater; applies asphalt to top side of mat; maximum hourly design rate 3.61 tons asphalt per hour; construction date 2004
EP42	Slate, backing drum, granule tank and backing tank; maximum hourly design rate 9.72 tons per hour; construction date 1978
EP2005-4	CRL Backing Storage Tank: storage tank for backing material; maximum hourly design rate 5.61 tons per hour; construction date 2005, Smoot
EP2005-2	AWA/CRL Backing Receiver: receiver for pneumatic transfer system; maximum hourly design rate 3.40 tons per hour; construction date 2005, Smoot
EP2005-3	CRL Backing Receiver: receives backing material from storage tank pneumatically; maximum hourly design rate 2.21 tons per hour; construction date 2005, Smoot
EP31	Backing Run Tank: maximum hourly design rate 2.21 tons per hour
EP31C	Mineral Application; maximum hourly design rate 10.46 tons per hour
EP31D	Granule Run Tank: maximum hourly design rate 8.93 tons per hour
EP24A	Granule Distribution, Blender, and Storage System: maximum hourly design rate 22.082 tons per hour; construction date 1983
EP24C	Backing Run Tank and Mineral Application: maximum hourly design rate 3.23 tons per hour; construction date 1983
EP29A	CRL Limestone Surge Tank: stages limestone going to the mixer; maximum hourly design rate 3.17 tons per hour; construction date 1975
EP5	FGL Limestone Surge Tank: holds limestone for transfer to mixer; General Steel; construction date 1984
EP12	FGL Granule/Headlap Tank: holds granules and headlap for distribution onto asphalt coated sheet; maximum hourly design rate 35.692 tons per hour; construction date 1984, Reichel & Drews

Emission Point	Description of Emission Point
EP12A	FGL Blender and Mineral Application: granules and backing are applied to asphalt coated sheet; maximum hourly design rate 28.57 tons per hour; construction date 1984, Reichel & Drews
EP12B	FGL Backing Run Tank: holds backing material (sand) for transfer to mineral application; maximum hourly design rate 4.56 tons per hour; construction date 1984, Reichel & Drews
EP2	Bradley Mill #1: grinding limestone; maximum hourly design rate of 30 tons per hour; construction date 2009, Bradley/1012
EP2A	Bradley Mill #2: grinding limestone; maximum hourly design rate of 30 tons per hour; construction date 2009, Bradley/1012
EP2B	FGL Limestone Storage Tank: stores ground limestone; maximum hourly design rate of 87.9 tons per hour; construction date 1984, Peabody Tech Tank
EP3	FGL Limestone Fuller Heater & Tank Transfer: heats limestone; maximum hourly design rate of 48.905 tons per hour ; construction date 1984
EP5	FGL Limestone Surge Tank: holds limestone for transfer to mixer; maximum hourly design rate of 41.82 tons per hour; construction date 1984, General Steel
EP131	Bucket Elevator at Bradley Mills: transfer limestone from feed hopper to rock tanks; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 2009
EP132	Rock Tank for Bradley Mill #1:storage tank transfer for limestone feed to Bradley Mill #1; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 1984
EP133	Rock Tank for Bradley Mill #2:storage tank transfer for limestone feed to Bradley Mill #2; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 1984
EP48	FGL Coater: coats mat with asphalt; maximum hourly design rate 14.2 tons asphalt per hour; construction date 1991, Reichel & Drews
EP31A	Backing Silo; vented to baghouse (CD31A); maximum hourly design rate 9.244 tons per hour; construction date 1973
EP107	LRL Sand Unload from Truck: pneumatically unloading of truck to sand silo; maximum hourly design rate 8.28 tons per hour; construction date 1973
EP16A	LRL Limestone Storage Tank: stores limestone for transfer to heating process; maximum hourly design rate 24.211 tons per hour, construction date 1964
EP18	LRL Limestone Heat Tank Transfer: maintains temperature of limestone; maximum hourly design rate 16.93 tons per hour; construction date 1985, Fuller
EP19	LRL Limestone Surge Tank: holds limestone for transfer to mixer; maximum hourly design rate 16.93 tons per hour; construction date 1985
EP6C	FGL Asphalt Tank #1: capacity 22,700 gallons; construction date 1984, General Steel
EP6D	FGL Asphalt Tank #2: capacity 22,700 gallons; construction date 1984, General Steel

Emission Point	Description of Emission Point
EP23C	LRL Asphalt Tank #3: capacity 22,700 gallons; construction date 1987
EP23D	LRL Asphalt Tank #4: capacity 22,700 gallons; construction date 1987
EP47	LRL Coater: coats mat with asphalt; maximum hourly design rate 10.793 tons per hour; construction date 1973
EP13B	Sealdown Vertical and Horizontal Mixers; maximum hourly design rate 0.8135 tons per hour
EP47B	LRL Coating Mixers (Coater Horizontal and Coater Vertical)
EP13C	LRL Laminate Horizontal Supply Tank: previously called Horizontal Seal Down Tank; receives incoming laminate and stores for transfer to laminate run tank; tank capacity 11,250 gallons; maximum hourly design rate 0.5 tons per hour; construction date 1984
EP13D	LRL Sealdown Storage Tank: previously called Vertical Seal Down Tank; receives sealdown asphalt and transfers to supply tank; tank capacity 14,900 gallons; maximum hourly design rate 0.8135 tons per hour; construction date 1988
EP14A	LRL Sealdown Run Tank: maintains flow of sealdown to application pan; capacity 330 gallons; maximum hourly design rate 0.52 tons per hour; construction date 1984
EP120A	LRL Laminant run Tank: maintains flow of laminant to application pan; vented to CVM Fume Control Device , CFM #6 (CD120); capacity 550 gallons; maximum hourly design rate 0.50 tons per hour; construction date 1999
EP2002-3	Core Cut-off saw, cuts fiberboard tubing to proper length; construction date 1999
EP163	Metal works die Repair; surface grinders used to repair dies; vents to CD61 control device
EP54K	Multiple Portable Kerosene Space Heaters: 33.25 gallons per hour; maximum hourly design rate 4.5 MMBtu per hour

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source
Sand Unload from Rail Car
Sand Screw Conveyor
Sand Elevator
Sand Belt Conveyor
Headlap Truck Unloading
Headlap Hopper
Headlap Elevator
Headlap Storage Tank
Granule Unload from Railcar
Granule Truck Unloading
Granule Conveyor
Granule Storage Tanks

Description of Emission Source

Laminant Application
Sealdown Storage Tank Heater
Limestone Rock Unloaded into Piles
FGL Granule Conveyor
FGL Headlap Elevator
FGL Headlap Elevator
FGL Screen / Elevator
FGL Headlap Waste Tank
Laminant Storage Tank Heater
LRL Laminant Run Tank Heater
FGL Sand Elevator
Limestone Rock Piles
Williams Mill Rock Tank (out of service)
Polymer Unload Station
Metal Stamping Lubricant
LRL Hot Oil Heater
Bradley Mill Feed Hopper
Core Adhesive Application
FGL Sand Separator
FGL Excess Waste Elevator
FGL Belt Conveyor
CVM #4 Waste Oil
LRL Coating Preheater
Asphalt Storage Tank #3 Heater
Asphalt Storage Tank #4 Heater
LRL Granule Conveyor
Sealdown Supply Tank Heater
CVM #3 Waste Oil Tank
CRL Saturant Preheater
Asphalt Storage Tank #13 Heater
Asphalt Storage Tank #15 Heater
Bradley Mill #1 Heater Exhaust
Bradley Mill #2 Heater Exhaust
Sandlap Storage Tank, Conveyors, & Elevators
Asphalt Storage Tank #10 Heater
Asphalt Storage Tank #11 Heater
AWA Hot Oil Heater
Boiler #1
Boiler #2
Boiler #3
Boiler #4
Trailer mounted emergency generator (Atlas Copco QAS78JDS, USA005012)
FGL Hot Oil Heater
AWA FR Heater
FGL Unwind Stand and Slice Table
LRL Unwind Stand and Slice Table

Description of Emission Source

CVM #1 Waste Oil Tank
Plant Natural Gas Space Heaters
FGL Coating Preheater
Asphalt Storage Tank #12 Heater
Asphalt Storage Tank #14 Heater
Asphalt Storage Tank #1 Heater
Asphalt Storage Tank #2 Heater
Paint Stripe of Roll Products
Apply Orange Stripe to Products
CRL Paint Line Application
LRL Paint Line Application
LRL Adhesive Hot Oil Heater (EP2011-1)
EPPilot – Shingle recycle machine; construction date 1998 (out of service)

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

1. Missouri Air Pollution Control Program Construction Permit #0889-001
2. Missouri Air Pollution Control Program Construction Permit #1096-020
3. Missouri Air Pollution Control Program Construction Permit #0499-005
4. Missouri Air Pollution Control Program Construction Permit #072009-007
5. Missouri Air Pollution Control Program Construction Permit #092009-004
6. Missouri Air Pollution Control Program Construction Permit #112011-005
7. The permittee's *Control Device Operating Procedures*
8. The permittee's *GACT Compliance Monitoring Plan*

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

The following requirements apply to all conditions in addition to any other requirements listed in the specific conditions, unless otherwise noted in the specific conditions.

Recordkeeping:

1) The permittee shall record all required recordkeeping (i.e. inspections and corrective actions) in the appropriate format. Records may be kept electronically using database or workbook systems, as long as all required information is readily available for compliance determinations.[3]
2) The permittee shall make the *Control Device Operating Procedures* and *GACT Compliance Monitoring Plan* immediately available for inspection to department personnel upon request.

Reporting[4]:

1) The permittee shall report any exceedances of any of the terms imposed by this permit, or any malfunction which could cause an exceedance any of the terms imposed by this permit, no later than ten (10) days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition), to the air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
2) The permittee shall submit an annual certification[5] that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. All deviations and Part 64 exceedances and excursions shall be included in the compliance certifications. These certifications shall be submitted annually by **April 1st**, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to Environmental Protection Agency, Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

[3] The recordkeeping forms are attached, or the permitting authority has made a determination of equivalency of the form in use.
[4] Refer to General Permit Requirements, 10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements, page 55, for additional details, including semi-annual reporting of monitoring data.
[5] Refer to General Permit Requirements, 10 CSR 10-6.065(6)(C)3 Compliance Requirements, page 57, for more details.

PERMIT CONDITION 1

All Indirect Heating Sources[6]
10 CSR 10-6.405 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitations:

These emission units shall be limited to burning landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), and/or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent).

Monitoring/Recordkeeping:

No monitoring or recordkeeping is required for this condition based on 10 CSR 10-6.405 (1)(C): *An emission unit that is subject to 10 CSR 10-6.070 and in compliance with applicable provisions; or an emission unit fueled by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), and/or other gases with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) would be deemed in compliance with 10 CSR 10-6.405.*

[6] An indirect heating source is one in which fuel is burned for the primary purpose of producing steal, hot water, or hot air or other indirect heating of liquids, gases, or solids and, in the course of doing so, the products of combustion do not come into direct contact with the process material. This does not include portable spot space heating.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

CVM #3 Device Group	
Emission Unit	Description
CD 26	The following emission units are vented to this control device, CVM #3
EP32B	AWA Asphalt Tank #10: capacity 22,700 gallons; construction date 1992
EP32C	AWA Asphalt Tank #11: capacity 22,700 gallons; construction date 1992
EP28B	AWA Asphalt Tank #13: capacity 36,800 gallons; construction date 1996
EP49	AWA Saturator: applies asphalt to mat; maximum hourly design rate 2.90 tons asphalt per hour; construction date 1978
EP49A	AWA Coater: dip tank for applying asphalt to mat; maximum hourly design rate 7.40 tons asphalt per hour; construction date 1978
EP200	AWA (Overhead) Mixing System Vertical (east & west) Holding Tanks
EP200	AWA Polymer Mixer
EP200	AWA Mixing System Vertical Holding Tank: holds modified asphalt, part of AWA mixing system, capacity 10,000 gallons; construction date 2004
EP62C	CRL Asphalt Tank #12: capacity 36,800 gallons; construction date 1993
EP62D	CRL Asphalt Tank #14: capacity 36,800 gallons; construction date 1993
EP28C	CRL Asphalt Tank #15: capacity 36,800 gallons; construction date 1996
EP50	CRL Saturator: for applying asphalt to mat; maximum hourly design rate 8.15 tons per hour; construction date 1973
EP50A	CRL Coater: applies asphalt to mat; maximum hourly design rate 2.95 tons per hour; construction date 1973
	CRL Horizontal Mixer, AWA Horizontal Mixer
	CRL Vertical Mixer
	CRL Wet Looper, AWA Wet Looper

PERMIT CONDITION 1

EP32B, EP32C, EP62D, EP28B, EP28C, & EP200
10 CSR 10-6.060 Construction Permits #1096-020, Issued October 15, 1996
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Asphalt Storage Tanks

Emission Limitations:

1) The permittee shall not cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than zero percent (0%), except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period. **Exception:** As these emission units are ducted to a control device that also is used to control emissions from the saturators (EP49, EP49A, EP50, and EP50A), the opacity of the combined emission gases shall not be greater than twenty percent (20%)

during the time the saturator control device is operating. At any other time, the emission gases from the asphalt storage tank(s) shall meet the zero percent (0%) opacity limit specified for asphalt storage tanks.

2) The opacity of the tanks' exhaust shall be measured at the outlet of the control device, CVM #3.
3) The permittee may allow emissions to bypass the CVM Fume Control Device during periods of planned maintenance not exceeding 72 hours of duration, as long as the opacity is not greater than zero percent (0%), except for one consecutive 15-minute period in any 24-hour period when maintenance is being performed on the control device.
4) The permittee shall ensure that exhaust gases from EP32B, EP32C, EP62C, EP62D, EP28B, EP28C, & EP200 pass through CVM Fume Control Device, CVM #3 (CD#26). CVM #3 shall be operated at all times when the upstream emission units are in operation and maintained in accordance with the permittee's *Control Device Operating Procedures*. If the control device fails due to malfunction, corrective action shall be taken within 24 hours to return the control device to operation. If corrective action cannot be completed within 24 hours, the affected equipment and ventilation system either shall be shut down or shall be redirected to an alternate control device system.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote Reference, Monitoring, and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

Monitoring:

The permittee shall monitor the operation of the control device CVM #3 (CD#26). Specifically:

1) Once a day, while the control device is in operation, and after any maintenance is conducted on the control device, the permittee shall monitor and record the pressure differential to ensure that the control device is operating properly.
2) The permittee shall monitor all maintenance activities performed in accordance with the permittee's *Control Device Operating Procedures,* any malfunction repair actions, and all equipment replacement activities.

Recordkeeping:

1) The permittee shall maintain an operating and maintenance log for the CVM Fume Control Device using Attachment F (or its equivalent), which shall include the following:
   a) Pressure differential measurements,
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.,
2) The permittee shall record incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions using Attachment D (or its equivalent).

PERMIT CONDITION 2

EP49, EP49A, EP50, EP50A 40 CFR Part 63 Subpart AAAAAAA – National Emissions Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Emission Limitation:

1) The permittee shall not emit PM emissions from a coater or saturator in excess of 0.36[7] pounds per ton of asphalt roofing product manufactured.
2) The permittee shall operate CD26 (CVM #3) according to the *GACT Compliance Monitoring Plan* regarding the three-hour average inlet gas temperature operating range, and the three-hour average pressure drop operating range.

Monitoring:

The permittee shall monitor the inlet gas temperature and the pressure drop across CD26 according to the *GACT Compliance Monitoring Plan.*

Recordkeeping:

The permittee shall refer to the Endnote References, Recordkeeping on page 45 for a list of recordkeeping requirements.

PERMIT CONDITION 3

EP49, EP49A, EP50, & EP50A
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

AWA Filler Group (Listed Below)		
Emission Unit	Description	Control Devices
EP 39	AWA FR Storage Tank; fire retardant (FR) raw material storage; maximum hourly design rate 2.60 tons per hour; construction date 1989, Peabody Tech Tank	CD39, Baghouse

[7] Table 2 of Subpart AAAAAAA of Part 63 – Emission Limits for Asphalt Roofing Manufacturing (Coating) Operations for, 3. Combined saturator/coater production lines.

EP40	AWA FR Transfer Tank: holding tank for fire retardant (FR) during heating; maximum hourly design rate 2.60 tons per hour; construction date 1989, Peabody Tech Tank	CD40, Baghouse
EP41	AWA Limestone/FR Surge & Weight Tank: holds and weighs raw material; maximum hourly design rate 3.91 tons per hour; construction date 1989, General Steel	CD41, Baghouse

PERMIT CONDITION 1

AWA Filler Group
10 CSR 10-6.060 Construction Permits Required Construction Permit #0889-001, Issued August 4, 1989
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for
Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Handling and Storage

Emission Limitations:
The permittee shall not cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than one percent (1%).

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote Reference, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 of monitoring requirements.

PERMIT CONDITION 2

AWA Filler Group
10 CSR 10-6.060 Construction Permits Required Construction Permit #0889-001, Issued August 4, 1989
10 CSR 10-6.400 Restrictions of Particulate Matter from Industrial Processes

Emission Limitations:
1) Particulate matter shall not be emitted from EP39 in excess of 7.78 pounds per hour.
2) Particulate matter shall not be emitted from EP40 in excess of 7.78 pounds per hour.
3) Particulate matter shall not be emitted from EP41 in excess of 10.22 pounds per hour.
4) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases

Recordkeeping:
The permittee has been calculated to always be in compliance with this limitation. The calculations demonstrating compliance are in Attachment G. no monitoring, recordkeeping, or reporting is required for this permit condition.

AWA Precoater		
Emission Unit	Description	Control Devices
EP2004-1	AWA Precoater: also referred to as Top Coater; applies asphalt to top side of mat; maximum hourly design rate 3.61 tons asphalt per hour; construction date 2004	CD56, CVM Fume Control Device, CVM #9

PERMIT CONDITION 1

AWA Precoater 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Saturators
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from any saturator:

1) Any exhaust gases with opacity greater than 20 percent (20%); and
2) Any visible emissions from a saturator capture system for more than 20 percent (20%) of any period of consecutive valid observations totaling 60 minutes.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for the list of monitoring requirements.

PERMIT CONDITION 2

AWA Precoater 40 CFR
Part 63, Subpart AAAAAAA - National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Emission Limitations:

1) The permittee shall not emit PM emissions in excess of 0.06 pounds per ton of asphalt roofing product manufactured.
2) The permittee shall operate CD56 according to the *GACT Compliance Monitoring Plan* regarding the three-hour average inlet gas temperature operating range, and the three-hour average pressure drop operating range.

Monitoring:

The permittee shall monitor the inlet gas temperature and the pressure drop across CD56 according to the *GACT Compliance Monitoring Plan.*

Recordkeeping:

The permittee shall refer to the Endnote References, Recordkeeping on page 45 for a list of recordkeeping requirements.

Mineral Application (AWA System)		
Emission Unit	Description	Control Devices
EP42	Slate, backing drum, granule tank, and backing tank; maximum hourly design rate 9.72 tons per hour; construction date 1978	CD42, baghouse

PERMIT CONDITION 1
EP42
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:
No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Backing Area Group (Listed Below)		
Emission Unit	Description	Control Devices
EP2005-4	CRL Backing Storage Tank: storage tank for backing material; maximum hourly design rate 5.61 tons per hour; construction date 2005, Smoot	CD52, baghouse
EP2005-2	AWA/CRL Backing Receiver: receiver for pneumatic transfer system; maximum hourly design rate 3.40 tons per hour; construction date 2005, Smoot	CD51, baghouse
EP2005-3	CRL Backing Receiver: receives backing material from storage tank pneumatically; maximum hourly design rate 2.21 tons per hour; construction date 2005, Smoot	CD53, baghouse

PERMIT CONDITION 1
Backing Area Group
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Handling and Storage

Emission Limitations:
The permittee shall not cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than one percent (1%).

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

Backing Area Group
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

1) Particulate matter shall not be emitted from EP2005-4 in excess of 13.02 pounds per hour.
2) Particulate matter shall not be emitted from EP2005-2 in excess of 9.31 pounds per hour.
3) Particulate matter shall not be emitted from EP2005-3 in excess of 6.97 pounds per hour.
4) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring:

1) The baghouses (CD51, CD52, and CD53) shall be maintained such that the pressure drop remains in the normal operating range whenever the emission units are in operation.
2) All instruments and control equipment shall be calibrated, maintained, and operated according to the permittee's *Control Device Operating Procedures.*
3) Check and document the dust collector pressure drop daily, whenever the emission unit is in operation. If the pressure drop falls out of the normal operating range, corrective action shall be taken as soon as practicable but within eight (8) hours to return the pressure drop to normal.
4) Check and document the cleaning sequence of the dust collector every six (6) months.
5) Inspect bags for leaks and wear every six (6) months.
6) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods every six (6) months.

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

Mineral Application (CRL System)		
Emission Unit	Description	Control Devices
EP31	Backing Run Tank: maximum hourly design rate 2.21 tons per hour	CD31, baghouse
EP31C	Mineral Application: maximum hourly design rate 10.46 tons per hour	CD31, baghouse
EP31D	Granule Run Tank; maximum hourly design rate 8.93 tons per hour	CD31, baghouse

PERMIT CONDITION 1

Mineral Application
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:
No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20 %. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

Granule Distribution & Mineral Application (LRL Shingle Line)		
Emission Unit	Description	Control Devices
EP24A	Granule Distribution, Blender, and Storage System; maximum hourly design rate 22.082 tons per hour; construction date 1983	CD24C, baghouse
EP24C	Backing Run Tank and Mineral Application; maximum hourly design rate 3.23 tons per hour; construction date 1983	CD24C, baghouse

PERMIT CONDITION 1
Granule Distribution & Mineral Application
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:
The permittee shall not cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2
Granule Distribution & Mineral Application
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:
The permittee shall control emissions from the Granule Distribution & Mineral Application Group using baghouse CD24C. The baghouse shall be operated and maintained in accordance with the installation's Control Device Operation Procedure. CD24C shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD24C shall be kept on hand or on order at all times. If the filters are ever changed out under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be

on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:
The permittee shall monitor and record the operating pressure drop across CD24C at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the installation's Control Device Operation Procedure.

Recordkeeping:
1) The permittee shall document all pressure drop readings. (see Attachment H)
2) Al inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

CRL Limestone Surge Tank		
Emission Unit	Description	Control Devices
EP29A	CRL Limestone Surge Tank: stages limestone going to the mixer; maximum hourly design rate 3.17 tons per hour; construction date 1975	CD29C, baghouse

PERMIT CONDITION 1
EP29A
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:
No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2
EP29A
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:
1) Particulate matter shall not be emitted from EP29A in excess of 8.88 pounds per hour.
2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:
The permittee has been calculated to always be in compliance with this limitation. The calculations demonstrating compliance are in Attachment G. no additional monitoring, recordkeeping, or reporting is required for this permit condition.

FGL System Group		
Emission Unit	Description	Control Devices
EP12	FGL Granule/Headlap Tank: holds granules and headlap for distribution onto asphalt coated sheet; maximum hourly design rate 35.692 tons per hour; construction date 1984, Reichel & Drews	CD12, baghouse
EP12A	FGL Blender and Mineral Application: granules and backing are applied to asphalt coated sheet; maximum hourly design rate 28.57 tons per hour; construction date 1984, Reichel & Drews	CD12, baghouse
EP12B	FGL Backing Run Tank: holds backing material (sand) for transfer to mineral application; maximum hourly design rate 4.56 tons per hour; construction date 1984, Reichel & Drews	CD12, baghouse

PERMIT CONDITION 1

FGL System Group
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Material Handling & Storage
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:
1) *If FGL Backing Run Tank (EP12B) is operating when FGL Granule/Headlap Tank (EP12) and FGL Blender & Mineral Application (EP12A) are not operating:* The permittee shall not cause to be discharged into the atmosphere from stack (CD12) any emissions with opacity greater than one percent (1%).
2) *If more than one emission unit associated with this permit condition are operating:* the permittee shall not cause to be discharged into the atmosphere from stack (CD12) any emissions with opacity greater than twenty percent (20%). **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to sixty (60%).

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

FGL System Group
10 CSR 10-6.060 Construction Permits required, Construction Permit #112011-005

Emission Limitations:

The permittee shall control emissions from the EP12, EP12A, & EP12B Group using baghouse CD12. The baghouse shall be operated and maintained in accordance with the installation's *Control Device Operation Procedure*. CD12 shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD12 shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:

The permittee shall monitor and record the operating pressure drop across CD12 at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the installation's *Control Device Operation Procedure.*

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

Bradley Mills (FGL Filler System)		
Emission Unit	Description	Control Devices
EP2	Bradley Mill #1: grinding limestone; maximum hourly design rate of 30 tons per hour; construction date 2009, Bradley/1012	CD02, baghouse
EP2A	Bradley Mill #2: grinding limestone; maximum hourly design rate of 30 tons per hour; construction date 2009, Bradley/1012	CD02A, baghouse

PERMIT CONDITION 1

Bradley Mills
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart OOO Standards of
Performance for Nonmetallic Mineral Processing Plants
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from Bradley Mills #1 and #2 (EP2 and EP2A) any stack emissions which contain particulate matter in excess of 0.014 grains per dry standard foot (0.032 grams per dry standard meter).

Monitoring/Recordkeeping:
The permittee has been calculated to always be in compliance with this limitation. The calculations demonstrating compliance are in Attachment I. No additional monitoring, recordkeeping. Or reporting is required for this permit condition.

PERMIT CONDITION 2

Bradley Mills
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:
The permittee shall control emissions from the Bradley Mills using baghouse CD02 and CD02A. The baghouse shall be operated and maintained in accordance with the installation's *Control Device Operation Procedure.* CD02 and CD02A shall be equipped with a gauges or meters, which indicate the pressure drop across the control devices. The gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD02 and CD02A shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:
The permittee shall monitor and record the operating pressure drop across CD02 and CD02A at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the installation's *Control Device Operation Procedure.*

Recordkeeping:
1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with the requirement.

FGL Limestone Group (group is made up of the following emission units)		
Emission Unit	Description	Control Devices
EP2B	FGL Limestone Storage Tank: stores ground limestone; maximum hourly design rate of 87.9 tons per hour; construction date 1984, Peabody Tech Tank	CD02B, baghouse
EP3	FGL Limestone Fuller Heater & Tank Transfer: heats limestone; maximum hourly design rate of 48.905 tons per hour; construction date 1984	CD02B, baghouse
EP5	FGL Limestone Surge Tank: holds limestone for transfer to mixer; maximum hourly design rate of 41.82 tons per hour; construction date 1984, General Steel	CD05, baghouse through CD12, baghouse

PERMIT CONDITION 1

FGL Limestone Group
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Handling and Storage

Emission Limitations:
The permittee shall not cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than one percent (1%).

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

FGL Limestone Group
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:
1) Particulate matter shall not be emitted from EP2B in excess of 45.92 pounds per hour.
2) Particulate matter shall not be emitted from EP3 in excess of 41.22 pounds per hour.
3) Particulate matter shall not be emitted from EP5 in excess of 40.10 pounds per hour.
4) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet exhaust gases.
5) The permittee shall control emissions from the FGL Limestone Group using baghouse CD02B and CD05.
6) CD02B and CD05 shall be equipped with a gauges or meters, which indicate the pressure drop across the control devices. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.
7) Replacement filters for CD02B and CD05 shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:
1) The baghouses (CD02B and CD05) shall be maintained such that the pressure drop remains in the normal operating range whenever the emission units are in operation.
2) All instruments and control equipment shall be calibrated, maintained, and operated according to the permittee's *Control Device Operating Procedures.*
3) Check and document the dust collector pressure drop daily, whenever the emission units are in operation. If the pressure drop falls out of the normal operating range, corrective action shall be taken as soon as practicable but within eight (8) hours to return the pressure drop to normal.
4) Check and document the cleaning sequence of the dust collector every six (6) months.
5) Inspect bags for leaks and wear every six (6) months.

6) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods every six (6) months.
7) The permittee shall monitor the operating pressure drop across CD02B and CD05 at least once a day within each 24-hour calendar day period.

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

Bradley Mills "OOO" Group (FGL Filler System)		
Emission Unit	Description	Control Devices
EP131	Bucket Elevator at Bradley Mills: transfer limestone from feed hopper to rock tanks; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 2009	Unknown
EP132	Rock Tank for Bradley Mill #1:storage tank transfer for limestone feed to Bradley Mill #1; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 1984	Columbia
EP132	Rock Tank for Bradley Mill #2:storage tank transfer for limestone feed to Bradley Mill #2; fugitive emissions; maximum hourly design rate of 62.92 tons per hour; construction date 1984	Columbia

PERMIT CONDITION 1

Bradley Mills "OOO"
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart OOO Standards of
Performance for Nonmetallic Mineral Processing Plants

Emission Limitations:

1) The permittee shall not cause to be discharged into the atmosphere from either EP132 or EP133 emission units any fugitive emissions which exhibit greater than ten percent (10%) opacity.
2) The permittee shall not cause to be discharged into the atmosphere from EP131 emission unit any fugitive emissions which exhibit greater than seven percent (7%) opacity.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

FGL Coater/Mixers		
Emission Unit	Description	Control Devices
	FGL Horizontal Mixer	CD48, CVM Fume Control Device, CVM #4, Fiberbed Mist Collector System
	FGL Vertical Mixer	CD48, CVM Fume Control Device, CVM #4, Fiberbed Mist Collector System
EP48	FGL Coater: coats mat with asphalt; maximum hourly design rate 18.67 tons asphalt per hour; construction date 1991, Reichel & Drews	CD48, CVM Fume Control Device, CVM #4, Fiberbed Mist Collector System

PERMIT CONDITION 1

FGL Coater/Mixers
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Saturators 10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from any saturator: any exhaust gases with opacity greater than 20 percent; and any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

FGL Coater/Mixers
10 CSR 10-6.070 New Source Performance Regulations 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Saturators 10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes 40 CFR Part 63 Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Emission Limitations:

1) The permittee shall not emit PM emissions in excess of 0.06 pounds per ton of asphalt roofing product manufactured

2) The permittee shall operate CD48 (CVM #4) according to the *GACT Compliance Monitoring Plan* regarding the 3-hour average inlet gas temperature operating range, and the 3-hour average pressure drop operating range.
3) The permittee shall ensure that exhaust gas from this emission unit passes through CVM Fume Control Device, CVM #4 (CD48). CVM #4 shall be operated at all times when this emission unit is in operation and maintained in accordance with the permittee's *Control Device Operating Procedures.* If the CVM fails due to malfunction, corrective action shall be taken within 24 hours to return the CVM to operation. If corrective action cannot be completed within 24 hours, the affected equipment and ventilation system either shall be shut down, or shall be redirected to an alternate CVM Fume Control Device System.

Monitoring:
The permittee shall monitor the condition and operation of control device CVM #4 (CD48). Specifically:
1) Once a day, while the CVM is in operation, and after any maintenance is conducted on the control device, the permittee shall monitor and record the pressure differential to ensure that the control device is operating properly.
2) The permittee shall monitor all maintenance activities performed in accordance with the permittee's *Control Device Operating Procedures,* any malfunction repair actions, and all equipment replacement activities.

Recordkeeping:
1) The permittee shall refer to Endnote References, Recordkeeping on page 45 for a list of recordkeeping requirements.
2) The permittee shall maintain records of any equipment malfunctions. (see Attachment D)
3) The permittee shall maintain an operating and maintenance log for the CVM Fume Control Device which shall include the following:
   a) Pressure differential measurements, (see Attachment F)
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc., (see Attachment F)
   c) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions. (see Attachment D)
4) Attachments C, D, E, and F contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

Backing Silo (LRL Backing System)		
Emission Unit	Description	Control Devices
EP31A	Backing Silo; vented to baghouse (CD31A); maximum hourly design rate 9.244 tons per hour; construction date 1973	CD31A, baghouse
EP107	LRL Sand Unload from Truck: pneumatically unloading of truck to sand silo; maximum hourly design rate 8.28 tons per hour; construction date 1973	CD31, baghouse, through Backing Silo

PERMIT CONDITION 1
CD31A
10 CSR 10-6.220 Restriction of Visible Air Contaminants

Emission Limitations:
No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions per period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2
CD31A
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:
The permittee shall control emissions from EP31A using baghouse CD31A. CD31A shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures*. CD31A shall be equipped with gauges or meters, which indicate the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD31A shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:
The permittee shall monitor and record the operating pressure drop across CD31A at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the permittee's *Control Device Operating Procedures.*

Recordkeeping:
1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

PERMIT CONDITION 3
CD107
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:
1) Particulate matter shall not be emitted from EP106 in excess of 16.90 pounds per hour.

2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring:

1) The baghouse (CD31A) shall be maintained such that the pressure drop remains in the normal operating range whenever the emission unit is in operation.
2) All instruments and control equipment shall be calibrated, maintained, and operated according to the permittee's *Control Device Operating Procedures.*
3) Check and document the dust collector pressure drop daily, whenever the emission unit is in operation. If the pressure drop falls out of the normal operating range, corrective action shall be taken as soon as practicable but within eight (8) hours to return the pressure drop to normal.
4) Check and document the cleaning sequence of the dust collector every six (6) months.
5) Inspect bags for leaks and wear every six (6) months.
6) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods every six (6) months.

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachment D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

LRL Limestone Storage Tank		
Emission Unit	Description	Control Devices
EP16A	LRL Limestone Storage Tank: stores limestone for transfer to heating process; maximum hourly design rate 24.11 tons per hour, construction date 1964	CD16 &CD16A, baghouses in parallel

PERMIT CONDITION 1

LRL Limestone Storage Tank
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:

No owner or other person shall cause or permit to be discharged into the atmosphere from any existing source any visible emissions with an opacity greater than 40%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

LRL Limestone Storage Tank
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

1) Particulate matter shall not be emitted from EP16A in excess of 27.29 pounds per hour.
2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring:

1) The baghouses (CD16 &CD16A) shall be maintained such that the pressure drop remains in the normal operating range whenever the emission unit is operation.
2) All instruments and control equipment shall be calibrated, maintained, and operated according to the manufacturer's specifications and recommendations.
3) Check and document the dust collector pressure drop daily, whenever the emission unit is in operation. If the pressure drop falls out of the normal operating range, corrective action shall be taken as soon as practicable but within eight (8) hours to return the pressure drop to normal.
4) Check and document the cleaning sequence of the dust collector every six (6) months.
5) Inspect bags for leaks and wear every six (6) months.
6) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods every six (6) months.

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

PERMIT CONDITION 3

CD16A
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:

The permittee shall control emissions from EP16A using baghouse CD16A. CD16A shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures*. CD16A shall be equipped with gauges or meters, which indicate the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD16A shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:

The permittee shall monitor and record the operating pressure drop across CD16A at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the permittee's *Control Device Operating Procedures.*

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

LRL Limestone Heat Transfer Tank; LRL Limestone Surge Tank		
Emission Unit	Description	Control Devices
EP18	LRL Limestone Heat Tank Transfer: maintains temperature of limestone; maximum hourly design rate 16.93 tons per hour; construction date 1985, Fuller	CD18, baghouse
EP19	LRL Limestone Surge Tank: holds limestone for transfer to mixer; maximum hourly design rate 16.93 tons per hour; construction date 1985	CD19, baghouse

PERMIT CONDITION 1

EP18 and EP19
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Handling and Storage

Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than one percent (1%).

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

EP18 and EP19
10 CSR 10-6.060 Construction Permits Required, Construction Permit #112011-005

Emission Limitations:

The permittee shall control emissions from EP18 and EP19 using baghouse CD18 and CD19. CD18 and CD 19 shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures*. CD18 and CD 19 shall be equipped with gauges or meters, which indicate the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for CD18 and CD19 shall be kept on hand or on order at all times. If the filters are ever changed of under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters shall be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring:

1) The baghouses (CD18& CD19) shall be maintained such that the pressure drop remains in the normal operating range whenever the emission unit is operation.
2) All instruments and control equipment shall be calibrated, maintained, and operated according to the manufacturer's specifications and recommendations.
3) Check and document the dust collector pressure drop daily, whenever the emission unit is in operation. If the pressure drop falls out of the normal operating range, corrective action shall be taken as soon as practicable but within eight (8) hours to return the pressure drop to normal.
4) Check and document the cleaning sequence of the dust collector every six (6) months.
5) Inspect bags for leaks and wear every six (6) months.
6) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods every six (6) months.
7) The permittee shall monitor and record the operating pressure drop across CD18 and CD19 at least once a day with in each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the permittee's *Control Device Operating Procedures.*

Recordkeeping:

1) The permittee shall document all pressure drop readings. (see Attachment H)
2) All inspections, corrective actions, and instrument calibration shall be recorded. (see Attachment D)
3) Attachments D and H contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, shall be used to certify compliance with this requirement.

Asphalt Tanks & Coater		
Emission Unit	Description	Control Devices
EP6C	FGL Asphalt Tank #1: capacity 22,700 gallons; construction date 1984, General Steel	CD47, CVM Fume Control Device, CVM #1 (Fiberbed Mist Collector System)
EP6D	FGL Asphalt Tank #2: capacity 22,700 gallons; construction date 1984, General Steel	CD47, CVM Fume Control Device, CVM #1 (Fiberbed Mist Collector System)
EP23C	LRL Asphalt Tank #3: capacity 22,700 gallons; construction date 1987	CD47, CVM Fume Control Device, CVM #1 (Fiberbed Mist Collector System)
EP23D	LRL Asphalt Tank #4: capacity 22,700 gallons; construction date 1987	CD47, CVM Fume Control Device, CVM #1 (Fiberbed Mist Collector System)
EP47	LRL Coater: coats mat with asphalt ; maximum hourly design rate 10.793 tons per hour; construction date 1973	CD47, CVM Fume Control Device, CVM #1 (Fiberbed Mist Collector System)

PERMIT CONDITION 1

EP47
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

EP6C, EP6D, EP23C, and EP23D
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Asphalt Storage Tanks

Emission Limitations:

1) The permittee shall not cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than zero percent (0%), except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning. The control device shall not be bypassed during this 15-minute period. **Exception:** As these emission units are ducted to a control device that also is used to control emissions from a saturator (EP47), the opacity of the combined emission gases shall not be greater than twenty percent (20%) during the time the saturator control device is operating. At any other time, the emission gases from the asphalt storage tank(s) shall meet the zero percent (0%) opacity limit specified for asphalt storage tanks.
2) CVM #1 shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures*.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 3

EP47
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:

1) Particulate Matter shall not be emitted from EP47 in excess of 18.49 pounds per hour.
2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:
The permittee has been calculated to always be in compliance with this limitation. The calculations demonstrating compliance are in Attachment G. No additional monitoring, recordkeeping, or reporting is required for this permit condition.

PERMIT CONDITION 4

Asphalt Tanks & Coater
40 CFR Part 63 Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Emission Limitations:
1) The permittee shall not emit PM emissions in excess of 0.06 pounds per ton of asphalt roofing product manufactured.
2) The permittee shall operate CD47 (CVM #1) according to the *GACT Compliance Monitoring Plan* regarding the 3-hour average inlet gas temperature operating range, and the 3-hour average pressure drop operating range.

Monitoring:
The permittee shall monitor the inlet gas temperature and the pressure drop across CD47 (CVM #1) according to the *GACT Compliance Monitoring Plan.*

Recordkeeping:
The permittee shall refer to Endnote References, Recordkeeping on page 45 for a list of recordkeeping requirements.

LRL Coating Mixers		
Emission Unit	Description	Control Devices
EP13B	Sealdown Vertical and Horizontal Mixers	CD47, Fiberbed Mist Collector System
EP47B	LRL Coating Mixers (Coater Horizontal and Coater Vertical)	CD47, Fiberbed Mist Collector System

PERMIT CONDITION 1

LRL Coating Mixers
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:
No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring/Recordkeeping:
The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

PERMIT CONDITION 2

LRL Coating Mixers
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitations:
1) Particulate matter shall not be emitted from EP13B in excess of 2.65 pounds per hour.
2) Particulate matter shall not be emitted from EP47B in excess of 18.49 pounds per hour.
3) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:
The permittee has been calculated to always be in compliance with this limitation. The calculations demonstrating compliance are in Attachment G. No additional monitoring, recordkeeping, or reporting is required for this permit condition.

PERMIT CONDITION 3

EP47B
40 CFR Part 63 Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Emission Limitations:
1) The permittee shall not emit PM emissions in excess of 0.06 pounds per ton of asphalt roofing product manufactured.
2) The permittee shall operate CD47 according to the *GACT Compliance Monitoring Plan* regarding the 3-hour average inlet gas temperature operating range, and the 3-hour average pressure drop operating range.

Monitoring:
The permittee shall monitor the inlet gas temperature and the pressure drop across CD47 according to the *GACT Compliance Monitoring Plan.*

Recordkeeping:
The permittee shall refer to Endnote References, Recordkeeping on page 45 for a list of recordkeeping requirements.

LRL Laminate Horizontal Supply Tank; LRL Sealdown Storage Tank		
Emission Unit	Description	Control Devices
EP13C	LRL Laminate Horizontal Supply Tank: previously called Horizontal Seal Down Tank; receives incoming laminate and stores for transfer to laminate run tank; tank capacity 11,250 gallons; maximum hourly design rate 0.5 tons per hour; construction date 1984	CD07, Fiberbed Dry Collector, CVM Fume Control Device, CVM #7
EP13D	LRL Sealdown Storage Tank: previously called Vertical Seal Down Tank; receives sealdown asphalt and transfers to supply tank; tank capacity 14,900 gallons; maximum hourly design rate 0.5 tons per hour; construction date 1988	CD07, Fiberbed Dry Collector, CVM Fume Control Device, CVM #7

PERMIT CONDITION 1

EP13C and EP13D
10 CSR 10-6.070 New source Performance Standards 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Asphalt Storage Tanks

Emission Limitations:

1) The permittee shall not cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than zero percent (0%), except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period. **Exception:** If the emissions from the asphalt storage tank(s) ate ducted to a control device for a saturator, the combined emissions shall meet the emission limit contained in§60.472(a) (i.e. 20% opacity) during the time the saturator control device is operating. At any other time, the emission gases from the asphalt storage tank(s) shall meet the zero percent (0%) opacity limit specified for asphalt storage tanks.
2) CVM #7 (CD07) shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures.*

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list for monitoring requirements.

LRL Sealdown Run Tank; LRL Laminant Run Tank		
Emission Unit	Description	Control Devices
EP14C	LRL Sealdown Run Tank: maintains flow of sealdown to application pan; capacity 330 gallons; maximum hourly design rate 0.52 tons per hour; construction date 1984	CD120, CVM Fume Control Device, CVM #6
EP120A	LRL Laminant Run Tank: maintains flow of laminant to application pan; vented to CVM Fume Control Device, CVM #6 (CD120); capacity 550 gallons; maximum hourly design rate 0.50 tons per hour; construction date 1999	CD120, CVM Fume Control Device, CVM #6

PERMIT CONDITION 1

EP14A and EP120A
10 CSR 10-6.070 New source Performance Standards 40 CFR
Part 60, Subpart A General Provisions and Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Asphalt Storage Tanks

Emission Limitations:

1) The permittee shall not cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than zero percent (0%), except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period. **Exception:** if the emissions from the asphalt storage tank(s) are ducted to a control device for a saturator, the combined emissions shall meet the emission limit contained in §60.472(a) (i.e. 20% opacity) during the time the saturator control device is operating. At any other time, the emission gases from the asphalt storage tank(s) shall meet the zero percent (0%) opacity limit specified for asphalt storage tanks.
2) CVM #6 (CD120) shall be operated and maintained in accordance with the permittee's *Control Device Operating Procedures.*

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

Miscellaneous VE Sources		
Emission Unit	Description	Control Devices
EP2002-3	Core cut-off saw, cuts fiberboard tubing to proper length; construction date 2002	CD60, Donaldson Torit Model 80 CAB
EP163	Metal works die repair, surface grinders used to repair dies; vents to CD61 control device	

PERMIT CONDITION 1

Miscellaneous VE Sources
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with opacity greater than 20%. **Exception:** A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with opacity up to 60%.

Monitoring/Recordkeeping:

The permittee shall refer to the Endnote References, Monitoring and Recordkeeping for Visible Air Contaminants on page 44 for a list of monitoring requirements.

Emergency Generators		
Emission Unit	Description	Control Devices
5286592	East boiler room emergency generator	*5286592*
5731855	AWA hot oil system emergency generator	*5731855*
5261563	West boiler room emergency generator	*5261563*

PERMIT CONDITION 1

Emergency Generators
40 CFR Part 60, NSPS Subpart JJJJ

Emission Limitations:

You must operate and maintain stationary spark ignition (SI) internal combustion engines (ICE) that achieves the emission standards as required in §60.42333 over the entire life of the engine.

Compliance Requirements for Owners and Operators.

1) You must demonstrate compliance according to one of the methods specified in Subsection (1)(A) or (1)(B) of this section. [§60.4243(b)]
   a) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in Paragraph §60.4243(a) of this section (included below). [§60.4243(b)(1)]
      i) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. [§60.4243(a)(1)]
      ii) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to §§60.4243(a)(2)(i) through (iii), as appropriate. [§60.4243(a)(2)]
   b) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to Paragraph §60.4243(B)(2)(i) (included below). [§60.4243(b)(2)]
      i) You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance. [§60.4243(b)(2)(i)]
2) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance

and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [§60.4243(d)]

3) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operation, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owner and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233. [§60.4243(e)]

Notifications, Reporting, and Recordkeeping:

Owners or operators of stationary SI ICE must meet the following notification, reporting, and recordkeeping requirements. [§60.4245]

1) You must keep records of the information in Subsections (1)(A) through (1)(D) of this section. [§60.4245(a)]
   a) All notification submitted to comply with this subpart and all documentation supporting any notification. [§60.4245(a)(1)]
   b) Maintenance conducted on the engine. [§60.4245(a)(2)]
   c) For a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. [§60.4245(a)(3)]
   d) For a non-certified engine or a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards. [§60.4245(a)(4)]
2) If subject to performance testing, you must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. [§60.4245(d)]

PERMIT CONDITION 2

5286592,5261563

40 CFR Part 63, MACT Subpart ZZZZ 63.6590(b)(3)

Emission Limitations:

The permittee will demonstrate less than 100 hours of operation annually in order to qualify as a "limited use stationary RICE".

Recordkeeping:

The permittee will keep track of the date, time, and duration that each unit operates and a cumulative total for the year in order to demonstrate that each unit operates less than 100 hours annually and meets the definition of limited use in the rule.

Portable Kerosene Heaters	
Emission Unit	Description
EP54K	Multiple Portable Kerosene Heaters

PERMIT CONDITION 1

EP54K

10 CSR 10-6.060 Construction Permits #122012-012, Issued December 21, 2012

Emission Limitations:

TAMKO Building Products, Inc. shall only burn K-1 grade kerosene in their portable Kerosene fired heaters (EP54K). [Special Condition 1.A]

Recordkeeping:

1) TAMKO Building Products, Inc. shall demonstrate compliance with Special Condition 1.A by obtaining records from the vendor for each shipment of fuel received. [Special Condition 1.B]
2) TAMKO Building Products, Inc. shall keep records required by Special Condition 1.B with the unit and make them available for Department of Natural Resources' employees upon request. [Special Condition 1.C]
3) TAMKO Building Products, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 1.D]

IV. Endnote References

Monitoring and Recordkeeping for Visible Air Contaminants

Monitoring:

1) The permittee shall visually scan (observe for a few seconds) the sky above the emission point for visible emissions, if visible emissions are perceived, the permittee shall conduct opacity readings only for the emission unit from which visible missions are perceived, using procedures similar to U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects of visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2) The permittee shall maintain the following monitoring schedule[8]:
   a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks. Should the permittee observe no deviations during this period, then:
      i) Permittee may observe once every two (2) weeks for a period of eight (8) weeks; then:
         (1) If a deviation is noted during the bi-weekly period, then monitoring reverts to weekly [2)a) above].
         (2) If no deviations are observed during the bi-weekly period, then the permittee may observe once per month. If a violation is noted at the once per month frequency, monitoring reverts to weekly [2)a) above]
   b) The permittee may continue monitoring on their regular schedule upon this permit renewal. In other words, the permittee does not have to restart opacity monitoring frequency with 2)a) above upon renewal permit issuance.
3) If the source reverts to weekly monitoring at any time, then the monitoring frequency shall progress as outlined by 2) above.

Recordkeeping:

The permittee shall maintain records of all observations results, noting:

1) Using Attachment B (or its equivalent).
   a) Whether any air emissions (except for water vapor) were visible from the emission units;
   b) All emission units from which visible emissions occurred;
   c) Whether the visible emissions were normal for the process;
2) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions using Attachment D (or its equivalent); and,
3) The permittee shall maintain records of all U.S. EPA Method 9 opacity tests performed using Attachment E (or its equivalent).

[8] The permittee may continue their current monitoring schedule, through the renewed operating permit issuance.

40 CFR Part 63 Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing

Recordkeeping:

§63.11564

(c) You must maintain the records specified in paragraphs (c)(1) through (c)(10) of this section.

1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification of Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).
2) Copies of emission tests used to demonstrate compliance and performance evaluations as required in §63.10(b)(2)(viii).
3) Documentation that shows that the following conditions are true if you use a previously-conducted emission test to demonstrate initial compliance as specified in §63.11562(a)(1)(ii), (b)(1)(ii), and (c)(1)(ii):
   i) The test was conducted within the last 5 years;
   ii) No changes have been made to the process since the time of the emission test;
   iii) The operating conditions and test methods used for the previous test conform to the requirements of this subpart; and
   iv) The data used to establish the value or range of values of the operating parameters, as specified in §63.11562(a)(2)(ii), (b)(2)(ii), or (c)(2)(ii), were recorded during the emission test.
4) Documentation that identifies the operating parameters and values specified in Table 4 of this subpart, and that contains the data used to establish the parameter values as specified in §63.11562(a)(2), (b)(2), (b)(3), or (c)(2).
5) Copies of the written manufacturers performance specifications used to establish operating parameter values as specified in §63.11562(b)(3)(iii).
6) Documentation of the process knowledge and engineering calculations used to demonstrate initial compliance as specified in §63.11562(e).
7) Documentation of the process knowledge and engineering calculations used to establish the value or range of values of operating parameters as specified in §63.11562(f).
8) A copy of the site-specific monitoring plan required under §63.11563(b) or (g).
9) A copy of the approved alternative monitoring plan required under §63.11563(h), if applicable.
10) Records of the operating parameter values required in Table 4 (see below) of this subpart to show continuous compliance with each operating limit that applies to you.

Table 4 of Subpart AAAAAAA of Part 63 – Operating Limits

If you comply with the emission limits using * * *	You must establish an operating value for * * *	And Maintain[a] * * *
1. A thermal oxidizer	Combustion zone temperature	The 3-hour average combustion zone temperature at or above the operating value established as specified in §63.11562(a)(2) and (b)(2).
2. A high-efficiency air filter or fiber bed filter	a. Inlet gas temperature[b], and b. Pressure drop across device[b]	The 3-hour average inlet gas temperature within the operating range established as specified in §63.11562(a)(2) and (b)(3) The 3-hour average pressure drop across he device within the approved operating range established as specified in §63.11562(a)(2) and (b)(3).
3. An electrostatic precipitator (ESP)	Voltage[c] to the ESP	The 3-hour average ESPO voltage[c] at or above the approved operating value established as specified in §63.11562(a)(2) and (b)(3).
4. Process modifications (i.e., a control device is not required	Appropriate process monitoring parameters[d].	The monitoring parameters within the operating values established as specified in §63.11562(c)(2)

[a] The 3-hour averaging period applies at all times other than startup and shutdown, as defined in §63.2. Within 24 hours of a startup event, or 24 hours prior to a shutdown event, you must normalize the emissions that occur during the startup or shutdown, when there is no production rate available to assess compliance with the lb/ton of product emission limits, with emissions that occur when the process is operational. The emissions that occur during the startup or shutdown event must be included with the process emissions when assessing compliance with the emission limits specified in Tables 1 and 2 of this subpart.

[b] As an alternative to monitoring the inlet gas temperature and pressure drop, you can use a leak detection system that identifies when the filter media has been compromised.

[c] As an alternative to monitoring the ESO voltage, you can monitor the ESP instrumentation (e.g. light, alarm) that indicates when the ESP must be cleaned and maintain a record of the instrumentation on an hourly basis. Failure to service the ESP within one hour of the indication is an exceedance of the applicable monitoring requirements specified in §63.11563(a).

[d] If you are not using a control device to comply with the emission limits specified in Table 2 of this subpart, the process parameters and corresponding parameter values that you select to demonstrate continuous compliance must correlate to the process emissions.

V. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
3) TAMKO Building Products, Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if TAMKO Building Products, Inc. fails to comply with the provisions or any condition of the open burning permit.
   a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
4) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
5) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;

b) Name and telephone number of person responsible for the installation;
c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
d) Identity of the equipment causing the excess emissions;
e) Time and duration of the period of excess emissions;
f) Cause of the excess emissions;
g) Air pollutants involved;
h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
i) Measures taken to mitigate the extent and duration of the excess emissions; and
j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit

available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
2) The permittee may be required by the director to file additional reports.
3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
8) The permittee shall collect, record, and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170
Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:[9]

1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
2) Should no violation of this regulation be observed during this period then-
   a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
   b) If a violation is noted, monitoring reverts to weekly.
   c) Should no violation of this regulation be observed during this period then-
      i) The permittee may observe once per month.
      ii) If a violation is noted, monitoring reverts to weekly.
3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
2) Whether the visible emissions were normal for the installation.

[9] The permittee may continue their current monitoring schedule, through the renewed operating permit issuance.

3) Whether equipment malfunctions contributed to an exceedance.
4) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.

c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
a) Monitoring methods outlined in 40 CFR Part 64;
b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
c) Any other monitoring methods approved by the director.

2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
a) Monitoring methods outlined in 40 CFR Part 64;

b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
      ii) 10 CSR 10-6.040, "Reference Methods";
      iii) 10 CSR 10-6.070, "New Source Performance Standards";
      iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

VI. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

1) Record Keeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
      iii) Exception. Monitoring requirements which require reporting more frequently than semiannually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit; this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
   c) Whether compliance was continuous or intermittent;
   d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and

e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The applicable requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously

emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
   a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
   b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
   b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
   c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
   d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Shannon Lenker, General Manufacturing Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VII. Attachments

Attachments follow.

Attachment A
Fugitive Particulate Matter Emission Observations

Date	Time	Visible Emissions					Abnormal Emissions		Initial
		Beyond Boundary		Less Than Normal	Normal	Greater Than Normal	Cause	Corrective Action	
		No	Yes						

Attachment B
Opacity Emission Observations

Date	Time	Visible Emissions				Abnormal Emissions		Initial
		Emission Source	Normal	Less Than	Greater Than	Cause	Corrective Action	

Attachment C
Visible Emission Observation Log

Emission Unit # or CVM # _____

Date/Time	Observer	Monitoring Method (Scan, Method 22, Method 9)	Visible Emissions (except for water vapor) (yes/no)	If visible emissions, are they normal for the process (yes/no)

Attachment D

Inspection/Maintenance/Repair/ Malfunction Log

Emission Unit # or CVM # ________________________________

Date/Time	Inspection/Maintenance Activities	Malfunction Activities					
		Malfunction	Impact	Duration	Cause	Action	Initials

Attachment E

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____ _____ _____
YES NO Signature of Observer

Attachment E
Alternate Form

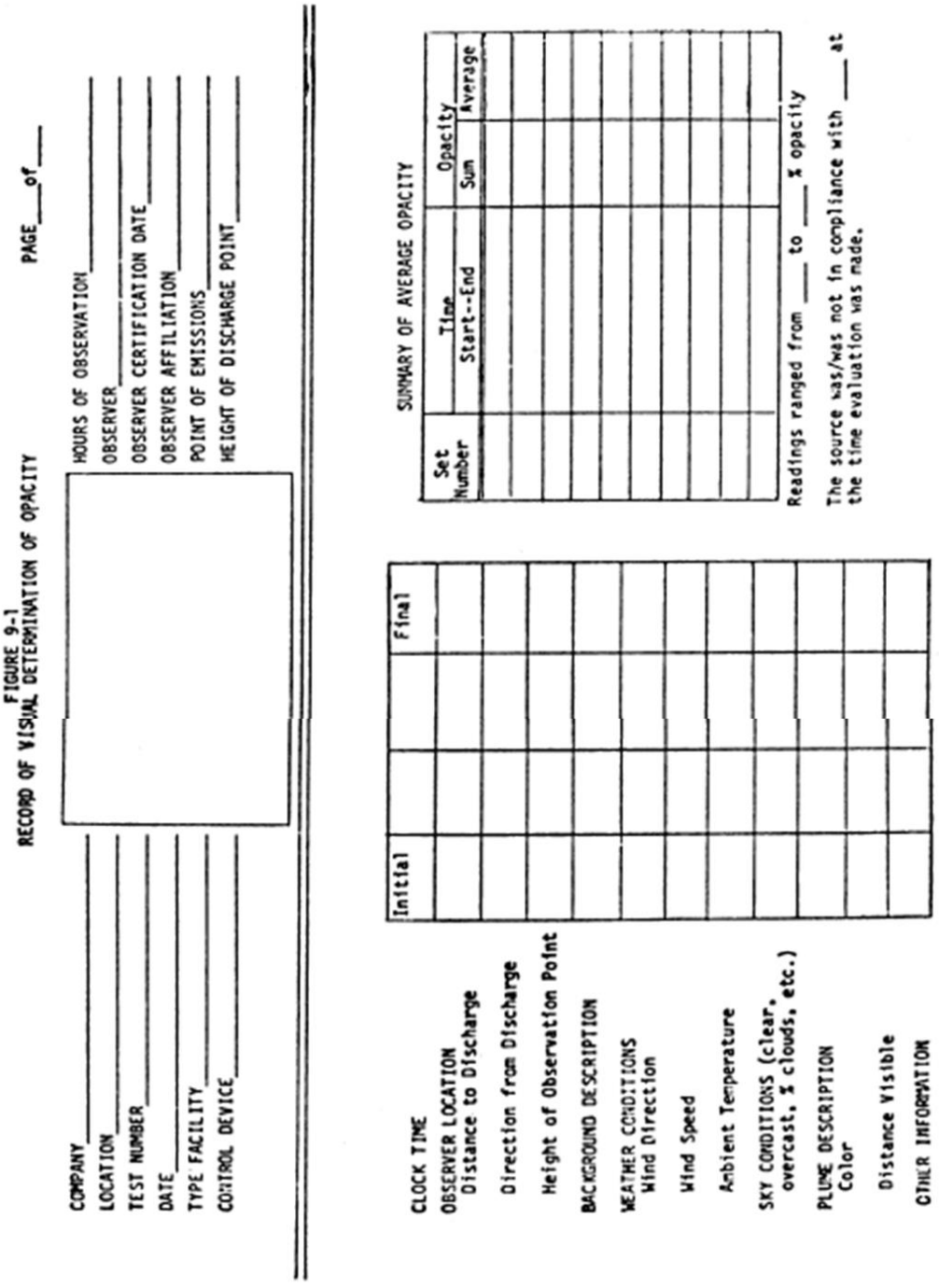

FIGURE 9-1
FIGURE 9–2—OBSERVATION RECORD

Page ___ of ___

Company .....
Location .....
Test Number .....
Date.

Observer .....
Type facility .....
Point of emissions .....

Attachment F

CVM Fume Control Device Maintenance Record

CVM # _____ Normal Operating Range: (0.1 in H_2O) to (15.0 in H_2O)

Gauge Reading					CVM Maintenance[2]		
Date/Time	ΔP Reading (in H_2O)	Is ΔP Reading Within the Normal Operating Range		Initials	Date/Time	Description of Maintenance	Initials
		Yes	No				

[1] If the pressure drop falls out of the normal operating grange, corrective action shall be taken within twenty-four (24) hours to return the pressure drop to normal. If corrective action cannot be completed within twenty-four (24) hours, the CVM ventilation system either will be shut down or will be directed to an alternate CVM Fume Control Device system.

[2] Records of malfunction shall be kept separately for each instance of malfunction. Records shall include impact on emissions, duration, probable cause and corrective action taken

Attachment G
10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the following equipment is in compliance with 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes.*

Allowable PM Emission Rate (E)
For process weight rates of 60,000 pounds per hour or less:
E (pounds per hour) = $4.10(P)^{0.67}$
Where: P=process weight rate in tons per hour
For process weight rates of greater than 60,000 pounds per hour:
E (pounds per hour)=$55(P)^{0.11}$-40
Where: P=process weight rate in tons per hour
Potential Uncontrolled PM Emission Rate (PTE) Calculation:
PTE (pounds per hour)=maximum hourly design rate (tons per hour) x Emission Factor (pounds per ton)

EU ID #	EU Description	Process Weight Rate (ton/hr)	PM Emission Factor (lb/ton)	Uncontrolled PM Emission Rate (lb/hr)	Allowable PMN Emission Rate (lb/hr)
EP39	AWA FR Storage Tank	2.6	0.72	1.87	7.78
EP40	AWA FR Transfer Tank	2.6	0.72	1.87	7.78
EP41	AWA Limestone/FR Surge Tank & Weight Tank	3.91	0.72	2.82	10.22
EP29A	CRL Limestone Storage Tank	3.17	0.72	2.28	8.88
EU0360	LRL Sand Unload from Railcar Pneumatically	8.28	0.72	5.96	16.90
EP47	LRL Coater	9.47	0.589[10]	5.58	18.49
EP13B	Sealdown Vertical/Horizontal Mixer	0.52	--	0.17[11]	2.65
EP47B	LRL Coating Mixers (Coater Horizontal and Coater Vertical)	9.47	0.589[12]	5.58	18.49

[10] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001
[11] Total PM Calculation=0.02 grains per cubic foot * 1000 cubic feet per minute * 60 minutes per hour/7000 grains per pound.
[12] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001

Attachment G (Continued)
10 CSR 10-6.400 Compliance Demonstration

Allowable PM Concentration=0.3gr/scf
PM Concentration Calculation:
Emission rate (gr/dscf)=Emission Rate (lb/hr) x (7000 grains/lb)/Stack flow rate (SCFM)/(60 min/hr)
Flow rates converted from actual to standard conditions using the ideal gas law. Standard temperature = 70°F as established in Missouri.

EU ##	Uncontrolled PM Emission Rate (lb/hr)	Stack	Stack Temp (°F)	Stack Flow Rate		Uncontrolled Potential Concentration (gr/scf)	Allowable Concentration (gr/scf)
				ACFM	SCFM		
EP39	1.87	CD-39	77	1,500	1,480	0.148	0.3
EP40	1.87	CD-40	400	3,600	2,219	0.098	0.3
EP41	2.82	CD-41	400	2,500	1,541	0.213	0.3
EP29A	2.28	CD-29A	77	2,200	2,171	0.123	0.3
EU0360	5.96	CD-105	77	4,000	3,948	0.176	0.3
EP47	5.58	CD-47	440	18,000	10,600	0.061	0.3

Attachment H
Pressure Drop Log

This sheet or an equivalent may be used to satisfy pressure drop recordkeeping requirements.

Control Device ID	Date/Time	Pressure Drop (inches water)	Within Specifications? (Yes/No)	Action	Initials

Attachment I

10 CSR 10-6.070, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants
Compliance Demonstration – According to §60.672(a)(1), the permittee shall not cause to be discharged into the atmosphere from any affected facility any stack emissions which contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf).

Convert stack flows from ACFM to SCFM
Given: stack flow rates for EP2 and EP2A = 10,000 acfm at 200 °F [Source: part 70 permit application]
Standard Temperature per EPA = 68 °F

$$SCFM = ACFM \times \frac{standard\ condition\ absolute\ temperature\ (68\ °F + 460)}{actual\ absolute\ temperature\ (stack\ T\ °F + 460)}$$

$$SCFM = 10{,}000 \times \frac{(68\ °F + 460)}{(200\ °F + 460)} = 8{,}000\ scfm$$

Convert emission limitation in §60.672(a)(1) (0.022 gr/dscf) to lbs/hr

$$\frac{0.022\ gr}{dscf} \times \frac{lb}{7000\ gr} \times \frac{8000\ scf}{min} \times \frac{60\ min}{hr} = 1.51\frac{lbs}{hr}$$

Calculate PTE PM
PTE = maximum hourly design rate times Emission Factor

EU ##	Emission Unit Description	Maximum Hourly Design Rate	Emission Factor (lb/ton)	Uncontrolled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)
EP2	Bradley Mill #2	30	0.015	0.45	1.51
EP2A	Bradley Mill #2	30	0.015	0.45	1.51

Conclusion
EP2 and EP2A will be in compliance, therefore no further monitoring, recordkeeping, or reporting are required.

STATEMENT OF BASIS

Permit Reference Documents
These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Application, received March 14, 2013;
2) 2012 Emissions Inventory Questionnaire, received May 30, 2013; and
3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Project History

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
200205040	05/06/2002	09/23/2002	Part 70 Operating Permit 112J Revision Pl	Closed out, per policy	09/24/2002		Roofing Products, Not subject to 112(j) – PTE is 4.1 tons per year which is below 10/25 tons HAPs limit
200210079	10/10/2002		Applicability Determination Request	Permit Required	11/07/2002		Adhesive Process
200210080	10/15/2002		Applicability Determination Request	Permit Required	11/14/2002		New Mixing System
200212104	12/19/2002		Applicability Determination Request	Closed out, per policy	02/10/2003		Splice Table Hood
200212105	12/19/2002		Sec 5 & 6: Deminimis and Minor	No permit required	04/29/2003		Mixing System
200303055	03/12/2003		Applicability Determination Request	Closed out, per policy	04/02/2003		Relocate Fume Filter
200303072	03/12/2003		Applicability Determination Request	No permit required	04/07/2003		Fan Change
200304111	04/21/2003		Applicability Determination Request	No Permit Required	05/15/2003		Building Ventilation Fans
200306105	06/25/2003		Applicability Determination Request	No Permit Required	07/25/2003		Tab Removal Automation
200311030	11/10/2003		Applicability Determination Request	No Permit Required	12/16/2003		Backing System Automation
200405129	05/24/2004	08/06/2007	Part 70 Operating Permit Minor	Closed out, per policy	06/21/2007		Various Changes

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
			Modification				
200405130	05/24/2004	08/06/2007	Part 70 Operating Permit Off-Permit Changes	Closed out, per policy	06/21/2007		
200407025	07/09/2004		Applicability Determination Request	No Permit Required	11/16/2004		Metric Shingles, Ventilation Fans, Conveyor System
200410057	10/25/2004		Applicability Determination Request	No Permit Required	11/24/2004		Space Heaters
200501050	01/13/2005		Applicability Determination Request	No Permit Required	03/08/2005		Six 115,000 Btu Gas Space Heaters
200501092	01/21/2005		Applicability Determination Request	No Permit Required	03/22/2005		Limestone Storage Tank
0970013020	05/15/1997	08/06/2007	Part 70 Operating Permit	Operating Permit Issues	08/07/2002	OP2002-055	Asphalt Shingles & Roll Products
200101011	01/09/2001		Applicability Determination Request	No Permit Required	01/29/2001		Vibratory Screen
22600013011	09/08/1989		Sec 5 & 6: Deminimis and Minor	Technical Review	09/11/1989	0889-001	
22600013016	05/24/1993		Sec 5 & 6: Deminimis and Minor	Technical Review	08/06/1993		
22600013005	09/07/1983		Sec 5 & 6: Deminimis and Minor	Technical Review	01/03/1984	0184-001	
22600013017	09/27/1993		Sec 5 & 6: Deminimis and Minor	Permit Issued	11/22/1993	0889-001A	
22600013018	11/01/1993		Sec 5 & 6: Deminimis and Minor	Technical Review	12/28/1993		
22600013013	10/05/1992		Sec 5 & 6: Deminimis and Minor	Permit Issued	02/02/1993		
22600013015	12/12/1992		Sec 5 & 6: Deminimis and Minor	Permit Issued	04/06/1993	0493-004	
22600013010	07/20/1989		Sec 5 & 6: Deminimis and Minor	Technical Review	08/08/1989	0889-001	
22600013012	06/28/1991		Sec 5 & 6: Deminimis and Minor	Technical Review	01/15/1992	0292-004	
22600013019	03/04/1996		Sec 5 & 6:	Permit	10/28/1996	1096-020	Replace 2

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
			Deminimis and Minor	Issued			horizontal Storage Tanks
0970013021	05/27/1997		Applicability Determination Request	No Permit Required	06/17/1997		15K CFM air pollution control device for fiberglass shingle line
0970013022	11/06/1997		Applicability Determination Request	No Permit Required	11/18/1997		CVM Fume Elimination System
0970013023	05/05/1997		Sec 5 & 6: Deminimis and Minor	Closed out, per policy	05/13/1997		Termination of Pilot Plant Project
0970013024	01/18/1996		Applicability Determination Request	No Permit Required	01/31/1996		Dust Collection System
1998020176	02/13/1998		Applicability Determination Request	No Permit Required	02/23/1998		Control Device Replacement
1998020177	02/13/1998		Applicability Determination Request	No Permit Required	02/23/1998		Change in construction plans – different control device
1998020179	02/13/1998		Applicability Determination Request	No Permit Required	02/27/1998		Adding three pieces of equipment
1998020198	02/17/1998		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	05/28/1998	0598-017	Tub grinder, off-loading, loading to conveyor, mill discharge
1998020207	02/17/1998		Sec 5 & 6: Deminimis and Minor	No Permit Required	03/09/1998		Replace old screw conveyor with a pneumatic lift transfer
199803065	03/20/1998		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	04/07/1999	0499-005	New spunbond production line
199810033	10/09/1998		Sales Tax emption requests	Sales Tax Completed	11/30/1998		CVM fume eliminator & prefilter $131,771.00
199810034	10/09/1998		Sales Tax emption Requests	Sales Tax Completed	11/09/1998		Fume eliminator prefilter $68,283.00
199810035	10/09/1998		Sales Tax emption Requests	Sales Tax Completed	11/09/1998		Dust Collector $20,994.00
199810036	10/09/1998		Sales Tax emption	Sales Tax Completed	11/17/1998		Manufacturing Dust capture

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
			Requests				$166,213.00
199810048	10/15/1998		Applicability Determination Request	No Permit Required	11/16/1998		Add CVM Vent
199811062	11/09/1998		Sales Tax emption Requests	Sales Tax Completed	07/23/1999		Fume Capture $5892.00
199811063	11/09/1998		Sales Tax emption Requests	Sales Tax Completed	03/31/1999		Filtration - $93,034.00
199901086	01/29/1999		Applicability Determination Requests	No Permit Required	02/24/1999		Add Mist Collectors
199902092	02/24/1999		Sales Tax emption Requests	Sales Tax Completed	02/25/2000		Vapor Ductwork & Sorbent $131,415.00
199909017	09/07/1999		Sales Tax emption Requests	Sales Tax Completed	11/29/2000		Duct Work $47,652
22600013019B	01/31/1996		Applicability Determination Requests	No Permit Required	01/31/1996		Dust Collection System
199902111	02/24/1999		Sales Tax emption Requests	Sales Tax Completed	02/25/2000		Sorbent Spray $45,457.50
200005083	05/11/2000		Applicability Determination Request	No Permit Required	06/09/2000		Comminution pumps
200007143	07/31/2000		Applicability Determination Request	No Permit Required	08/16/2000		Alternative Sand Loading
200010034	10/10/2000		Applicability Determination Request	No Permit Required	11/01/2000		Granule distribution system
22600013016B	08/04/1993		Applicability Determination Request	No Permit Required	08/27/1993		Product Relocation
22600013012B	02/19/1992		Applicability Determination Request	No Permit Required	05/20/1992		Cooling System
200511074	11/18/2005		Part 70 Operating Permit Admin. Amendment	Amendment Approved	06/23/2006	OP2002-055	Responsible Official
200603038	03/09/2006		Applicability Determination Request	No Permit Required	03/29/2006		Replace pneumatic pump
200606008	05/26/2006		Part 70 Operating Permit Admin. Amendment	Closed out, per policy	06/21/2007		Name Change
200704058	04/02/2007		Part 70	Closed out,	08/21/2007		Tank Changes

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
			Operating Permit Off-Permit Change	per policy			
200704059	04/02/2007		Part 70 Operating Permit Admin. Amendment	Closed out, per policy	08/21/2007		Name, Requirement Changes
200704070	04/16/2007		Applicability Determination Request	No Permit Required	05/17/2007		Shingle Waste Milling
200707027	06/27/2007	01/04/2012	Part 70 Operating Permit Minor Modification	Closed out, per policy	08/21/2007		Down Time
200707029	06/20/2007		Applicability Determination Request	No Permit Required	08/07/2007		Dust Collector
200708024	07/30/2007		Applicability Determination Request	No Permit Required	09/18/2007		Blast Cleaning
200803094	03/28/2008		Applicability Determination Request	No Permit Required	06/06/2008		Mill Shingle Waste
200807071	07/21/2008		Applicability Determination Request	No Permit Required	08/18/2008		Sandlap Trial
200808059	08/21/2008		Applicability Determination Request	No Permit Required	12/30/2008		Leftover Material Usage
200808072	08/20/2008		Applicability Determination Request	No Permit Required	10/29/2008		Haust fan replacement
200808073	08/27/2008		Applicability Determination Request	Permit Required	11/18/2008		Metal Shingle Operation
200810065	10/23/2008		Applicability Determination Request	No Permit Required	02/04/2009		Sand Separation Process
200811049	11/26/2008		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	06/01/2009	062009-001	Metal Shingle Operation
200812051	12/22/2008		Applicability Determination Request	No Permit Required	01/22/2009		Rock Elevator
200812052	12/22/2008		Temporary or Pilot Plant Permit	Temporary Permit Issued	02/20/2009	022009-006	Filled Laminant Trial
200901033	01/23/2009		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	07/09/2009	072009-007	Rock Grinding
200902047	02/20/2009		Applicability Determination Request	No Permit Required	03/31/2009		Headlap Replacement

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
200907051	07/01/2009		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	09/08/2009	092009-004	Limestone Transfer System
200910024	10/08/2009	05/01/2010	Sec 5 & 6: Deminimis and Minor	Temporary Permit Issued	02/23/2010	022010-009	Topcoat System
200910025	10/08/2009		Confidentiality Request	Request Approved	11/06/2009		Confidentiality for 2009-10-024
200912031	12/03/2009		Applicability Determination Request	No Permit Required	03/18/2010		Vacuum System
200912032	12/14/2009		Corrections and Amendments	Amendment Approved	03/03/2010	0722009-007A	Update Throughput
201004029	04/08/2010		Applicability Determination Request	No Permit Required	04/23/2010		Emission Routing
201005046	05/20/2010		Corrections and Amendments	Correction Approved	07/08/2010		Alternative Coatings
201006065	06/23/2010		Part 70 Operating Permit Minor Modification	Closed out Inappropriate Request	07/19/2010		Equipment Changes
201007035	07/19/2010		Sec 5 & 6: Deminimis and Minor	No Permit Required	10/22/2010		Alternate Material Line
201009054	09/23/2010		Applicability Determination Request	Permit Required	05/10/2011		Raw Material Trial
201009055	09/23/2010		Confidentiality Request	Closed out, per policy	02/16/2011		Confidentiality for 2010-09-054
201104067	04/25/2011		Applicability Determination Request	No Permit Required	05/16/2011		Bagging System
201105011	05/02/2011		Temporary or Pilot Plant Request	Temporary Permit issued	05/16/2011	052011-008	Raw Material Test
201106010	06/03/2011		Sec 5 & 6: Deminimis and Minor	Section 5 Permit issued	11/08/2011	112011-005	Increase Production
201108078	08/26/2011		Applicability Determination Request	No Permit Required	10/31/2011		Waste Collection Process
201109066	09/26/2011		Applicability Determination Request	No Permit Required	11/30/2011		Gas-Fired Heaters
201206088	06/28/2012		Applicability Determination Request	No Permit Required	08/20/2012		Exhaust
201207031	07/12/2012		Applicability Determination Request	Application Withdrawn by Applicant	11/14/2012		Asphalt Trial

Project ID	Start Date	Expired	Project Type	Status	Completion Date	Permit No.	Description
201210040	10/17/2012		Applicability Determination Request	Closed out, per policy	11/30/2012		Makeup Air Units
201210051	10/18/2012		Applicability Determination Request	No Permit Required	11/26/2012		Dust Collector
201211052	11/19/2012		Sec 5 & 6: Deminimis and Minor	Section 5 Permit Issued	12/21/2012	122012-012	Air Makeup and Kerosene Heaters
201212005	12/03/2012		Applicability Determination Request	No Permit Required	03/20/2013		Unwind Stands
201304005	03/18/2013		Applicability Determination Request	No Permit Required	05/01/2013		Mixing System

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits
In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

1) 10 CSR 10-6.100, *Alternate Emission Limits,* is not applicable because the installation is in an ozone attainment area.
2) 40 CFR Part 60 Subpart Ka, *Standards of Performance for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984,* was marked as applicable in the permit application. This rule does not apply to this installation because there are no storage tanks greater than 40,000 gallons constructed, reconstructed, or modified after May 19, 1978, and prior to July 23, 1984.
3) 40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984,* was marked as applicable in the permit application. On October 15, 2003, the US EPA amended this rule. The amended rule does not apply to storage vessels with a capacity greater than or equal to 40,000-gallons (151 m^3) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 20,000-gallons (75 m^3) but less than 40,000-gallons (151 m^3) storing a liquid with a maximum true vapor pressure less than 15.0 kPa or storage vessels with a capacity less than 20,000-gallons (75 m^3). Consequently, there are no storage tanks at the installation that are subject to this rule.

Permit Reference Documents
Missouri Air Pollution Control Program (APCP) Construction Permit #0889-001:

Missouri Air Pollution Control Program (APCP) Construction Permit #1096-020:
Missouri Air Pollution Control Program (APCP) Construction Permit #0499-005:
Missouri Air Pollution Control Program (APCP) Construction Permit #072009-007:
Missouri Air Pollution Control Program (APCP) Construction Permit #092009-004:
Missouri Air Pollution Control Program (APCP) Construction Permit #112011-005:

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1) APCP Construction Permit #0184-001A, issued January 3, 1984, authorized the installation of the Fiberglass Roofing Line (FGL). The only condition established by this construction permit was related to compliance testing that was to be performed no later than 180 days after initial start-up. Since this testing has been completed by the permittee, this special condition is not included in the operating permit.
2) APCP Construction Permit #0889-001, issued August 4, 1989, authorized the installation of an AWA fire retardant production system. The special conditions established by this construction permit are contained in Permit Conditions for the AWA Filler Group. No Revisions were made.
3) APCP Construction Permit # 0493-004, issued April 6, 1993, authorized the installation of CRL Asphalt Tank #12 and #14. This construction permit contained no special conditions.
4) APCP Construction Permit #1096-020, issued October 15, 1996, authorized in installation of AWA Asphalt Tank #13 and CRL Asphalt Tank #15. The special conditions established by this construction permit are contained in Permit Condition 1 of emission unit group *CVM #3 Device Group*. No revisions were made.
5) APCP Construction Permit #0598-017, issued May 11, 1998, authorized the installation of a pilot plant for shredding and grinding of tabs and waste asphalt. This construction permit contained no special conditions.
6) Any construction permit references to maintaining control devices according to manufacturer's specifications have been changed to a reference to the permittee's *Control Device Operating Procedures.*

New Source Performance Standards (NSPS) Applicability

1) 40 CFR Part 60 Subpart OOO, *Standards of Performance of Nonmetallic Mineral Processing*
   a) Bradley Mill #1 (EP2) and Bradley Mill #2 (EP2A) are subject to this rule. Permit Attachment I demonstrates that these units are in compliance with the particulate matter emission limitation.
   b) Bucket elevator at Bradley Mills (EP131), Rock Tank for Bradley Mill #1 (EP132) and Rock Tank for Bradley Mill #2 (EP133) are subject to the opacity limitation established in this rule.
   c) FGL Limestone Dumping to Feed Hoppers is exempt from the requirements of §60.672, standards for particulate matter because according to §60.672(d), truck dumping of nonmetallic minerals into any feed hopper is exempt.
   d) The following emission units are exempt from the requirements of Part 60 Subpart OOO because these units commenced construction or modification prior to August 31, 1983.

EU ##	EU Description	Construction Date
NA	Williams Mill	1964
NA	Williams Mill Hopper	1964
NA	Williams Mill Limestone Elevator & Rock Tank	1964

2) 40 CFR Part 60 Subpart UU, *Standards of Performance for Asphalt Roofing Manufacture*
   a) AWA Precoater (EP2004-1) is subject to the opacity limitation and the particulate matter emission limitation established in this rule. NSPS Performance testing conducted on August 18, 2005 demonstrated compliance with these limitations.
   b) FGL Granule/Headlap Tank (EP12), FGL Blender & Mineral Application (EP12A), and FGL Backing run Tank (EP12B) emit through a common emission point (CD-12). EP12B is subject to the opacity requirements of Part 60 Subpart UU because it is a mineral (sand) storage tank constructed in 1984. EP12 and EP12A are not affected facilities under Part 60 Subpart UU. EP12 and EP 12A are subject to the opacity limits of 10 CSR 10-6.220. Therefore, FGL System Group Permit Condition 1 was written such that EP12B must meet the more stringent requirements of Part 60 Subpart UU whenever EP12B is operating alone. Otherwise, the combined emissions of EP12, EP12A, and EP12B shall meet the opacity requirements of 10 CSR 10-6.220.
   c) FGL Coater (EP48) is subject to opacity limitation and the particulate matter emission limitation established in this. NSPS Performance testing conducted during the period of July 22 and 23, 2003 demonstrated compliance with these limitations.
   d) The following emission units are exempt from the requirements of Part 60 Subpart UU because these units commenced construction or modification prior to November 18, 1980.

	EU Description	**Construction Date**
EP49	AWA Saturator	1978
EP49A	AWA Coater	1978
EP29A	CRL Limestone Surge Tank	1975
EP50	CRL Saturator	1975
EP50A	CRL Coater	1975
EP16A	LRL Limestone Storage Tank	1964
EP47	LRL Coater	1973
Emission Units Without Limitations		
NA	AWA Slate/Backing Drum/Granule Tank/Backing Tank	1978
NA	CRL Backing Run Tank	1973
NA	LRL Backing Silo	1973
NA	LRL Sand Unload from Railcar Gravity Feed	Pre-1980
NA	LRL Sand Screw Conveyor	Pre-1980
NA	LRL Sand Elevator	Pre-1980
NA	Sand Belt Transfer	Pre-1980, replaced 2004, however, replacement did not meet definition of modification since there was no increases in the amount of any air pollutant (to which Subpart UU applies) emitted into the atmosphere

40 CFR Part 60, *Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Mineral Handling and Storage*
EP106, LRL Sand Unload from truck: pneumatically unloading of truck to sand silo; maximum hourly design rate 8.28 tons per hour; construction date 1973, CD31A, baghouse, through backing silo

This source was installed prior to the applicability date (Pre-1983); therefore the NSPS does not apply.

40 CFR Part 60, *Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Saturators* – AWA Precoater: The permittee shall not cause to be discharged into the atmosphere from any saturator: particulate matter in excess of: 0.8 pounds per ton (0.4[13] kg/MG) of asphalt shingle or mineral-surfaced roll roofing produced; or, 0.8 pounds per ton (0.4 kg/Mg) of saturated felt or smooth-surfaced roll roofing produced.

This condition was removed as a duplicative and unnecessary requirement. However, should the more stringent or equivalent standard be removed, this requirement may need to be inserted back into the permit.

40 CFR Part 60, *Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*
Trailer mounted emergency generator, Trailer mounted emergency air compressor #1, Trailer mounted emergency air compressor #2, Trailer mounted emergency air compressor #3
This generator is a non-road IC engine manufactured in 2002. The unit is not subject to NSPS SP IIII.

40 CFR Part 60, *Subpart UU Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture – Standards for Saturators*
FGL Coater/Mixer

Emission Limitations:
The permittee shall not cause to be discharged into the atmosphere from any saturator, Particulate Matter in excess of: 0.8 pounds per ton (0.4[14] kilograms per megagrams) of asphalt shingle or mineral-surfaced

[13] -----Original Message-----
Sent: Wednesday, January 31, 2007 2:59 PM
Subject: Re: Typo in 40 CFR Part 60, subpart UU
Mr. Novello
This email is to confirm your email describing the error that was introduced into 40 CFR 60.472(a)(1)(ii) in the October 17, 2000 amendments to the regulations. The amendments notice inadvertently inserted an extra zero in the particulate standard resulting in "0.04 kg/Mg of saturated felt or smooth-surfaced roll roofing produced" instead of the correct "0.4 kg/Mg of saturated felt or smooth-surfaced roll roofing." The amendment to 60.472(a)(1)(ii) was only intended to add corresponding English units to the standard and not in any way change the level of the standard. We regret any inconvenience this error may have caused. We plan to correct the error in a notice later this year. Feel free to call me should regulatory issues arise because of this error.
Foston Curtis
Environmental Scientist
US EPA Office of Air Quality Planning & Standards
D205-02
Research Triangle Park, NC 27709
(919) 541-1063
(919) 541-0516 FAX

[14] -----Original Message-----
Sent: Wednesday, January 31, 2007 2:59 PM
Subject: Re: Typo in 40 CFR Part 60, subpart UU
Mr. Novello

roll roofing produced, or 0.8 pounds per ton (0.4 kilograms per megagrams) of saturated felt or smooth-surfaced roll roofing produced.

This condition was removed as a duplicative and unnecessary requirement. However, should the more stringent or equivalent standard be removed, this requirement may need to be inserted back into the permit.

Maximum Achievable Control Technology (MACT) Applicability
40 CFR Part 63 Subpart LLLLL, *National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing*

This rule does not apply to the installation because the installation is not a major source of Hazardous Air Pollutants (HAPs) nor is it located at a major source of HAPs. A major source emits 10 tons per year or more of a single Hazardous Air Pollutants (HAP) or 25 tons or more of a combination of HAPs.

40 CFR Part 63, Subpart *ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*
Trailer mounted emergency generator, Trailer mounted emergency air compressor #1, Trailer mounted emergency air compressor #2, Trailer mounted emergency air compressor #3
This emergency generator is a non-road IC engine manufactured in 2002. This unit is not subject to MACT SP ZZZZ.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
There are no regulatory issues or ambiguous limitations with regard to NESHAP. The reader is referred to the body of the permit for the specific NESHAP regulatory requirements.

Compliance Assurance Monitoring (CAM) Applicability
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*
The CAM rule applies to each pollutant specific emission unit that:
- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

This email is to confirm your email describing the error that was introduced into 40 CFR 60.472(a)(1)(ii) in the October 17, 2000 amendments to the regulations. The amendments notice inadvertently inserted an extra zero in the particulate standard resulting in "0.04 kg/Mg of saturated felt or smooth-surfaced roll roofing produced" instead of the correct "0.4 kg/Mg of saturated felt or smooth-surfaced roll roofing." The amendment to 60.472(a)(1)(ii) was only intended to add corresponding English units to the standard and not in any way change the level of the standard. We regret any inconvenience this error may have caused. We plan to correct the error in a notice later this year. Feel free to call me should regulatory issues arise because of this error.
Foston Curtis
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40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

The only emission units possibly subject to CAM would be EP18 and EP19, since they are the only units with pre-control emissions that exceed or are equivalent to the major source threshold. However, they are not subject to an emission limitation or standard other than the visible emissions. CAM does not apply to sources whose only emission limitation is visible emissions.

At the time of issuance, the permittee does not have any emission units subject to the applicability portion of 40 CFR Part 64 requiring submittal of a CAM plan.

Greenhouse Gas Emissions
This installation is not a "major source" for greenhouse gases.
Note that this source is subject to the Greenhouse Gas Reporting Rule, but has always been below the reporting threshold of 25,000 actual emissions of GHG. Missouri regulations do not require the installation to report CO_2 emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO_2 emissions were not included within the permit. Please refer to Enclosure B following this statement for a more detailed GHG emission presentation.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit without Controls (tons/yr)[1]	Potential to Emit with Controls (tons/yr)[1]
CO	64.16	64.15
CO_2e	75,656	75,656
HAP[15]	0.002	0.002
NO_x	62	62
PM_{10}	564	34.05
PM_{25}	443	27.66
SO_x	13.03	13.03
VOC	222.9	222.9
Lead	0.002	0.002
NH_3	0.23	0.23

[1]Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

Other Regulatory Determinations
1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
   10 CSR 10-6.220 incorporates by reference 40 CFR Part 60 and 10 CSR 10-6.070 according to subsection (1)(H).

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
   10 CSR 10-6.260 does not apply to combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2 or liquid petroleum gas as defined by American Society for Testing Materials (ASTM) because according to §(1)(A)2, these sources are exempt.

[15] The uncontrolled HAP emissions of 1.72 tons per year are reported as VOCs or PM_{10}.

3) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*
   a) 10 CSR 10-6.400 applies to Bradley Mills #1 and #2 (EP2 and EP2A); however, the particulate matter emission limitation established by Part 60 Subpart OOO (1.5 pounds per hour) is more stringent than the emission limitation established by 10 CSR 10-6.400. The particulate matter limit established by Part 60 subpart OOO is contained in Bradley Mills permit condition.
   b) 10 CSR 10.6-400 applies to AWA Precoater (EP2004-1) and FGL Coater (EP48); however, the particulate matter emission limitation established by Part 60 Subpart UU (0.08 lbs/ton of shingle produced) is more stringent than the emission limit established by 10 CSR 10-6.400. the particulate matter limit established by Part 60 Subpart UU is contained in Permit Condition EP2004-1-001 and Permit Condition EP48-001
   c) 10 CSR 10-6.400 applies to the following emission units. The calculation below demonstrate that the emission units are in compliance with both the PM Emission Rate and the PM Concentration provided that the required control devices are in operation and working properly:
   Emission Rate Limit
   For process weight rates of 60,000 pounds per hour or less:
   E (pounds per hour) = $4.10(P)^{0.67}$
   Where: P = process weight rate in tons per hour
   For process weight rates of greater than 60,000 pounds per hour:
   E (pounds per hour) = $55(P)^{0.11}$-40
   Where: P = process weight rate in tons per hour

   PM Emission Rate
   Emission rate (lb per hour) = maximum hourly design rate (tons per hour) x PM Emission Factor (lb/ton) x (1 – Control Efficiency)

EU ##	EU Description	Maximum Hourly Design Rate (ton/hr)	PM Emission Factor (lb/ton)	Overall Control Efficiency (%)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)
EP49	AWA Saturator	2.90	2.43[16]	95	0.35	8.36
EP49A	AWA Coater	7.40	0.589[17]	95	0.22	15.67
EP50	CRL Saturator	8.15	2.43[18]	95	0.99	16.72
EP50A	CRL Coater	2.95	0.589[19]	95	0.09	8.46
EP2005-4	AWA/CRL Backing Storage Tank	5.61	0.72	95	0.20	13.02

[16] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001
[17] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001
[18] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001
[19] Total PM Emission factor from ARMA Report Preliminary Emission Factors for Criteria Pollutants from Asphalt Manufacturing, dated May 8, 2001

EP2005-2	AWA Backing Receiver	3.40	0.72	95	0.12	9.31
EP2005-3	CRL Backing Receiver	2.21	0.72	95	0.08	6.97
EP2B	FGL Limestone Storage Tank	57.69	0.72	95	2.08	45.92
EP3	FGL Limestone Fuller Heater & Transfer Tank	34.60	0.72	95	1.25	41.22
EP5	FGL Limestone Run Tank	30.50	0.72	95	1.10	40.10
EP106	LRL Sand Unload from Truck	8.28	0.72	95	0.30	16.90
EP16A	LRL Limestone Storage Tank	16.93	0.72	95	0.61	27.29
EP18	LRL Limestone Heat Transfer Tank	16.93	0.72	95	0.61	27.29
EP19	LRL Limestone Surge Tank	16.93	0.72	95	0.61	27.29

Notes:
1) The PM emission factors are from the ARMA report "Preliminary Emission Factors for Criteria Pollutants from Asphalt Roofing Manufacturing" dated May 08, 2001

PM Concentration

Emission rate (gr/dscf) = Emission Rate (lb/hr) x (7000 grains/lb)/Stack flow rate (SCFM)/(60 min/hr)
Flow rates converted from actual to standard conditions using the ideal gas law. Standard temperature, as established in Missouri, is 70 °F.

EU ##	Stack ##	Controlled Emission Rate (lb/hr)	Stack Temp °F	Stack Flow		Controlled Emission Rate (gr/scf)	Allowable Emission Rate (gr/scf)
				ACFM	SCFM		
EP49	CD-26	1.65	400	63,000	38,826	0.005	0.3
EP49							
EP50							
EP50A							
EP2005-4	CD-52	0.20	77	700	691	0.034	0.3
EP2005-2	CD-51	0.12	77	600	592	0.024	0.3
EP2005-3	CD-53	0.08	77	600	592	0.016	0.3
EP2B	CD-2B	3.32	370	2,500	1,596	0.243	0.3
EP3							
EP5	CD-5	1.10	330	1,660	1,114	0.115	0.3
EP106	CD-31A	0.30	77	1,800	1,777	0.020	0.3
EP16A	CD-16A	0.61	200	3,000	2,409	0.030	0.3

EP18	CD-18	0.61	400	1,000	616	0.115	0.3
EP19	CD-19	0.61	400	1,900	1,171	0.061	0.3

d) 10 CSR 10-6.400 does not apply to the installation's indirect natural gas and propane-fired combustion units because according to §(1)(B)6, the burning of fuel for indirect heating is exempt.
e) 10 CSR 10-4.400 does not apply to the installation's fugitive units because according to §(1)(B)7, fugitive emissions are exempt.
f) 10 CSR 10-6.400 does not apply to the following emission units because according to §(1)(B)11, emissions units that at maximum design capacity have a potential to emit less than one-half (0.5) pounds per hour of particulate matter are exempt.

EU ##	EU Description	Maximum Hourly Design Rate (ton/hr)	Emission Factor (lb/ton)	Potential Emission Rate (lb/hr)
EP12	FGL Granule/Headlap Tank	25.06	0.0069	0.17
EP12A	FGL Blender & Mineral Application	28.57	0.0069	0.20
EP12B	FGL Backing Run Tank	3.51	0.0069	0.02
NA	AWA Slate/Backing Drum/Granule Tank/Backing Tank	9.72	0.0069	0.07
NA	AWA Polymer Unload Station	1.59	0.0069	0.01
NA	CRL Backing Run Tank	2.21	0.0069	0.02
NA	CRL Mineral Application	10.46	0.0069	0.07
NA	CRL Granule Run Tank	8.93	0.0069	0.06
NA	FGL Tab Pneumatic Transfer	0.61	0.72	0.44
NA	FGL unwind Rack/Splice Table	1.39	0.02[20]	0.03
NA	Williams Mill	10.0	0.039	0.39
NA	LRL Backing Silo	8.28	0.0021	0.02
NA	LRL Granule/Headlap Tank	19.57	0.0069	0.14
NA	LRL Blender & Headlap Storage System	19.57	0.0069	0.14
NA	LRL Backing Run Tank	3.23	0.0069	0.02
NA	LRL Mineral Application	3.23	0.0069	0.02
NA	LRL Unwind Stand & Splice Table	6.13	0.02[21]	0.12
NA	Shingle Recycle Machine	50	0.024[22]	0.12

[20] Assumed 0.1 times AP-42 emission factor.
[21] Assumed 0.1 times AP-42 emission factor
[22] Construction Permit 0598-017

4) The LRL Laminator applies a small line (approximately one inch wide) of laminant to the roof shingles to allow the shingles to stick to each other during installation. 40 CFR Part 60 Subpart UU does not apply to the LRL Laminator because this process unit does not meet the definition of a saturator. The LRL Laminator is listed as an Emission Unit without Limitations.
5) The Blower, which was included in the Part 70 permit application, has been removed from the installation and is not included in the operating permit.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*
EP49, EP49A, EP50, & EP50A

Emission Limitations:
1) Particulate matter shall not be emitted from EP49 in excess of 8.37 pounds per hour.
2) Particulate matter shall not be emitted from EP49A in excess of 15.67 pounds per hour.
3) Particulate matter shall not be emitted from EP50 in excess of 16.72 pounds per hour.
4) Particulate matter shall not be emitted from EP50A in excess of 8.46 pounds per hour.
5) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

This condition was removed as a duplicative and unnecessary requirement. However, should the more stringent or equivalent standard be removed, this requirement may need to be inserted back into the permit.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis
Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1) The specific pollutant regulated by that rule is not emitted by the installation;
2) The installation is not in the source category regulated by that rule;
3) The installation is not in the county or specific area that is regulated under the authority of that rule;
4) The installation does not contain the type of emission unit which is regulated by that rule;
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control ProgramP a schedule for achieving compliance for that regulation(s).

Prepared by:

David Buttig
Environmental Engineer

Enclosure A, 10 CSR 10-6.400 Exemption Listing

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP101	Sand Unload from Rail Car	0.0	0.0	16.9	Yes	Yes		Yes	0%
EP102	Sand Screw Conveyor	0.0	0.0	16.9	Yes	Yes		Yes	0%
EP103	Sand Elevator	0.0	0.0	16.9	Yes	Yes		Yes	0%
EP105	Sand Pneumatic Unload from Rail Car	3.8	0.2	16.9		Yes	Yes	Yes	1%
EP106	Sand Pneumatic Unload from Truck	3.8	0.2	16.9		Yes	Yes	Yes	1%
EP16A	LRL Limestone Storage Tank	11.9	0.6	27.3		Yes	Yes	Yes	2%
EP18	LRL Limestone Heat Exchange	35.1	1.8	44.6		Yes	Yes	Yes	4%
EP19	LRL Limestone Surge Tank	26.7	0.1	42.1		Yes	Yes	Yes	0%
EP1A	Bradley Mill Feed Hopper	0.0	0.0	40.0	Yes	Yes		Yes	0%
EP2B	FGL Limestone Storage Tank	22.5	1.1	44.4		Yes	Yes	Yes	3%
EP3	FGL Limestone Heat Exchange	15.9	0.8	41.2		Yes	Yes	Yes	2%
EP47	LRL Coating Process	0.2	0.0	18.5	Yes	Yes	Yes	Yes	0%

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP48	FGL Coating Process	0.3	0.0	24.3	Yes	Yes	Yes	Yes	0.%
EP49	AWA Saturating Process	7.0	0.4	8.4		Yes	Yes	Yes	4%
EP49A	AWA Coating Process	0.2	0.0	15.7	Yes	Yes	Yes	Yes	0%
EP5	FGL Limestone Run Tank	14.0	0.7	40.1		Yes	Yes	Yes	2%
EP50	CRL Saturator Process	19.8	1.0	16.7			Yes[23]	Yes	6%
EP50A	CRL Coating Process	0.1	0.0	8.5	Yes	Yes	Yes	Yes	0%
EP2	Bradley Mill #1 Cyclone	0.2	0.0	25.2	Yes	Yes	Yes	Yes	0%
EP104	Sand Belt Conveyor	0.0	0.0	16.9	Yes	Yes	Yes	Yes	0%
EP108	Headlap Truck Unloading	0.1	0.0	32.1	Yes	Yes	Yes	Yes	0%
EP109	Headlap Hopper	0.1	0.0	32.1	Yes	Yes	Yes	Yes	0%
EP110	Headlap Elevator	0.1	0.0	32.1	Yes	Yes	Yes	Yes	0%
EP111	Headlap Storage Tank	0.1	0.0	32.1	Yes	Yes	Yes	Yes	0%

[23] This indicates that monitoring of the control devices is necessary.

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP112	Granule Unload from Rail Car	0.1	0.0	42.1	Yes	Yes	Yes	Yes	0%
EP113	Granule Truck Unloading	0.1	0.0	42.1	Yes	Yes	Yes	Yes	0%
EP114	Granule Conveyor	0.1	0.0	42.1	Yes	Yes	Yes	Yes	0%
EP115	Granule Storage Tanks	0.1	0.0	42.1	Yes	Yes	Yes	Yes	0%
EP12	FGL Granule Headlap Run Tank	0.1	0.0	35.5	Yes	Yes	Yes	Yes	0%
EP12A	FGL Blender & Mineral Application	0.1	0.0	38.8	Yes	Yes	Yes	Yes	0%
EP12B	FGL Backing Run Tank	0.0	0.0	9.5	Yes	Yes	Yes	Yes	0%
EP130	Limestone Rock Unloaded into Piles	0.2	0.0	40.0	Yes	Yes	Yes	Yes	0%
EP131	Bradley Mill Bucket Elevator	0.1	0.0	40.0	Yes	Yes	Yes	Yes	0%
EP132	Bradley Mill Rock Tank #1	0.0	0.0	25.2	Yes	Yes	Yes	Yes	0%
EP133	Bradley Mill Rock Tank #2	0.0	0.0	25.2	Yes	Yes	Yes	Yes	0%
EP135	FGL Granule Conveyor	0.0	0.0	21.4	Yes	Yes	Yes	Yes	0%
EP136	FGL Headlap Elevator	0.0	0.0	23.2	Yes	Yes	Yes	Yes	0%

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP137	FGL Headlap Elevator	0.0	0.0	23.2	Yes	Yes	Yes	Yes	0%
EP138	FGL Screen/Elevator	0.0	0.0	9.2	Yes	Yes	Yes	Yes	0%
EP139	FGL Headlap Waste Tank	0.0	0.0	9.2	Yes	Yes	Yes	Yes	0%
EP140	FGL Sand Elevator	0.0	0.0	9.2	Yes	Yes	Yes	Yes	0%
EP15	Limestone Rock Piles	0.0	0.0	40.0	Yes	Yes	Yes	Yes	0%
EP15A	Williams Mill Feed Hopper	0.0	0.0	19.2	Yes	Yes	Yes	Yes	0%
EP15B	Williams Mill Rock Elevator and Rock Tank	0.0	0.0	19.2	Yes	Yes	Yes	Yes	0%
EP161	Polymer Unload Station	0.0	0.0	5.6	Yes	Yes	Yes	Yes	0%
EP2004-1	AWA Precoater	0.1	0.0	9.7	Yes	Yes	Yes	Yes	0%
EP2005-2	AWA Backing Receiver	1.6	0.1	9.3		Yes	Yes	Yes	1%
EP2005-3	CRL Backing Receiver	1.0	0.1	13.0		Yes	Yes	Yes	1%
EP2005-4	AWA/CRL Backing Storage Tank	2.6	0.1	13.0		Yes	Yes	Yes	1%
EP24	LRL Granule Conveyor	0.1	0.0	42.1	Yes	Yes	Yes	Yes	0%

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP24A	LRL Granule Distribution	0.1	0.0	30.1	Yes	Yes	Yes	Yes	0%
EP24C	LRL Backing Run Tank and Application	0.0	0.0	9.0	Yes	Yes	Yes	Yes	0%
EP29A	CRL Lime Run Tank	1.5	0.1	8.9		Yes	Yes	Yes	1%
EP2A	Bradley Mill #2 Cyclone	0.2	0.0	25.2	Yes	Yes	Yes	Yes	0%
EP31	CRL Backing Run Tank	0.0	0.0	7.0	Yes	Yes	Yes	Yes	0%
EP31A	Backing Storage Tank	3.8	0.2	16.9		Yes	Yes	Yes	1%
EP31C	CRL Mineral Application	0.0	0.0	19.8	Yes	Yes	Yes	Yes	0%
EP31D	CRL Granule Run Tank	0.0	0.0	17.8	Yes	Yes	Yes	Yes	0%
EP39	FR Storage Tank	5.5	0.3	21.7		Yes	Yes	Yes	1%
EP40	AWA FR Heating Tank	1.4	0.1	8.6		Yes	Yes	Yes	1%
EP41	AWA FR/Lime Run Tank	1.8	0.1	10.2		Yes	Yes	Yes	1%
EP42	AWA Mineral Application	0.0	0.0	18.8	Yes	Yes	Yes	Yes	0%
EP43	FGL Unwind Stand and Splice Table	0.	0.0	5.1	Yes	Yes	Yes	Yes	0%

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP44	LRL Unwind Stand and Splice Table	0.1	0.0	13.8	Yes	Yes	Yes	Yes	0%
EP8	FGL Tab Transfer	0.3	0.0	2.9	Yes	Yes	Yes	Yes	0%
EP6C	Asphalt Storage Tank #1	0.1	0.0	5.9	Yes	Yes	Yes	Yes	0%
EP6D	Asphalt Storage Tank #2	0.1	0.0	5.9	Yes	Yes	Yes	Yes	0%
EP13C	Horizontal Laminant Storage Tank	0.0	0.0	1.0	Yes	Yes	Yes	Yes	0%
EP13D	Vertical Sealdown Storage Tank	0.0	0.0	1.0	Yes	Yes	Yes	Yes	0%
EP23C	Asphalt Storage Tank #3	0.1	0.0	4.5	Yes	Yes	Yes	Yes	0%
EP23D	Coating Storage Tank #4	0.1	0.0	4.5	Yes	Yes	Yes	Yes	0%
EP28B	Asphalt Storage Tank #13	0.0	0.0	4.4	Yes	Yes	Yes	Yes	0%
EP28C	Asphalt Storage Tank #15	0.4	0.0	3.3	Yes	Yes	Yes	Yes	1%
EP32B	Asphalt Storage Tank #10	0.1	0.0	3.2	Yes	Yes	Yes	Yes	0%
EP32C	Asphalt Storage Tank #11	0.1	0.0	3.1	Yes	Yes	Yes	Yes	0%
EP62C	Asphalt Storage Tank #12	0.1	0.0	4.0	Yes	Yes	Yes	Yes	0%

Emission Unit	Emission Unit Description	Calculated Maximum PM Emission Rate Uncontrolled (lbs/hr)	Calculated Maximum PM Emission Rate Controlled (lbs/hr)	PM Emission Limit Established in Rule (lbs/hr)	PTE < 0.5 tons/hr?	Uncontrolled PTE < Limit?	Overall Control Efficiency > 90%?	Controlled PTE < Limit?	PTE as % of Allowable
EP62D	Asphalt Storage Tank #14	0.6	0.0	4.0		Yes	Yes	Yes	1%

Enclosure B, GHG Calculations

		Yearly CO_2e (metric tons)	Yearly CO_2e (short tons)
CO_2 – from natural gas	68568	68,635	75,656
CH_4 (as CO_2e) – from natural gas	27.2		
N_2O (as CO_2e) –from natural gas	40.1		
CO_2 – from propane	0.0	0.0	0.0
CH_4 (as CO_2e) – from propane	0.0		
N_2O (as CO_2e) –from propane	0.0		
CO_2 – from fuel oil	0.0	0.0	0.0
CH_4 (as CO_2e) – from fuel oil	0.0		
N_2O (as CO_2e) –from fuel oil	0.0		
TOTAL		68,635	75,656

This PTE estimation includes 2 make up air units that TAMKO has submitted a construction permit application that MoDNR has under review.

December 19, 2012

Annual Green House Gas Emission Calculation/Estimate – High Street 2012

	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons	Metric Tons
	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
CO_2e – from natural gas	1619.6	1551.4	1496.1	1386.6	1333.9	1253.2	1195.0	1182.8	1069.3	1141.2	1534.3	1534.3	16298
CO_2e – from propane	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CO_2e – from fuel oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CO_2e	1619.6	1551.4	1496.1	1386.6	1333.9	1253.2	1195.0	1182.8	1069.3	1141.2	1534.3	1534.3	16298

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

MAR 29 2016

Mr. Shannon Lenker
TAMKO Building Products, Inc.
601 North High Street
Joplin, MO 64801

Re: TAMKO Building Products, Inc., 097-0013
Permit Number: OP2013-008A

Dear Mr. Lenker:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact David Buttig at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:dbk

Enclosures

c: Southwest Regional Office
PAMS File: 2013-03-081